

Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

Fitch

Date

28 Sept

Pg.#

1

SPECIMEN

or

TIME SPECIES # DIR. BAND NO. REMARKS

ADP ✓

1330 Begin watch

1330 Western Gull 12
Heermans Gull 1

1335 B. Pelican 1

1337 Cormorant 2

1339 Common Murre 1

1341 B. Pelican 1

W. Gull 2

1342 C. Murre 14

Sooty Shear. 1

Red Phalarope 11

1343 Calif. Gull 1

Cormorant 2

1345 Heerman's Gull 1

C. Murre 7

1349 Heerman's Gull 1

C. Murre 8

Cormorant 8

W. Gull 12

B. Pelican 1

1350 Warblers sp. 1

1355 B. Pelican 1

Cormorant 2

W. Gull 12

1358 B. Pelican 2

1402 C. Murre 2

1405 B. Pelican 2

1407 Red Phalarope 6

1411 B. Pelican 5

Begin watch

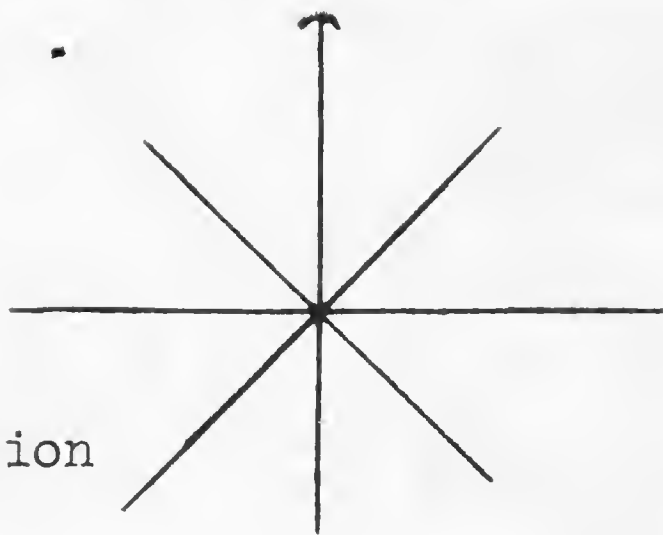
B. Gull 2
W. Gull 51
H. Gull 8
Pelican 26
Cormorant 17
Alcid 1
C. Murre 42
Sooty Shear. 732
Red Phalarope 17
N. Phalarope 17
W. Gull sp. 16
P. Jaeger 1
PR Shear 42
SPW 1
L. Shear 1
Herring Gull 6
Black Petrel 1
New Zealand Shear 1
Shear. Pet. 1

possibly yellow breast

sitting on H₂O

67 987
156.6

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TIME SPECIES # DIR. BAND NO. REMARKS

1415 Marine Mammal 1 California sealion

1418 B. Pelican 2

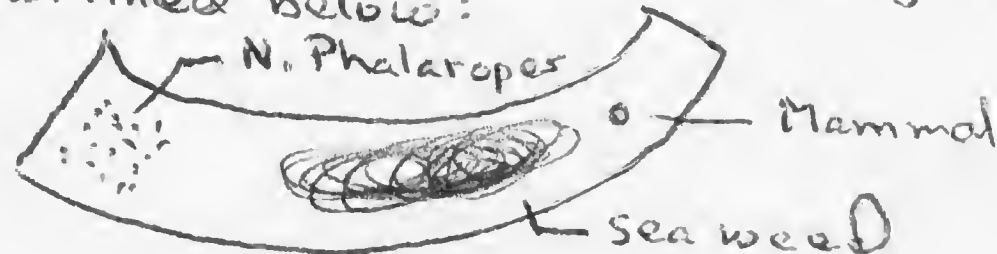
1419 C. Murre 3

1420 Northern Phalarope 11

Marine mammal 1

California sealion

Observed in a smooth sea area
50' wide and approx. 200' long as
outlined below:



1422 C. Murre 1

1425 Cormorant 3

1427 Rhallarops sp. 2

1428 W. Gull 2

1429 Common Murre 1

B. Pelican 1

Sooty Shear 1

1430 W. Gull 1

Heermann's Gull 1

B. Pelican 1

1432 B. Pelican 2

1433 B. Pelican 2

1435 C. Murre 1

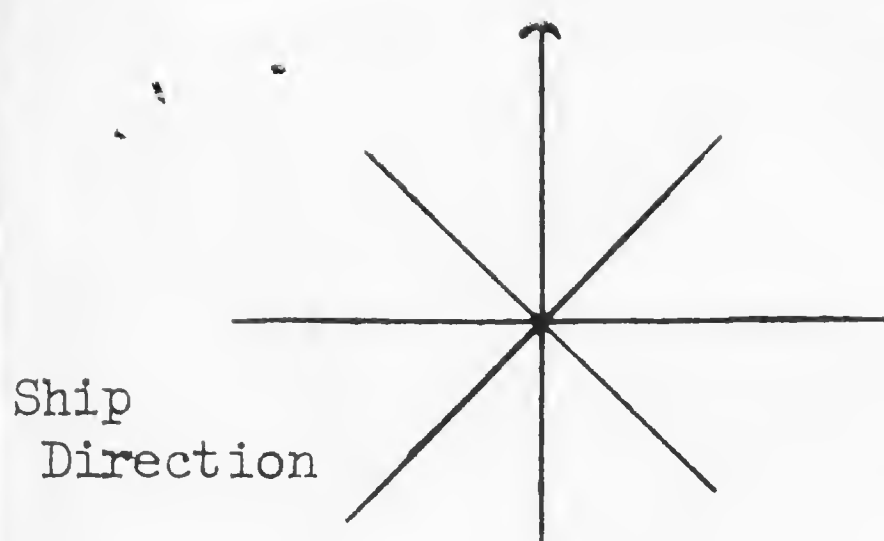
Sooty Shear. 2

W. Gull 2

1438 Sooty Shear. 2200
10

sitting on H₂O in flock

1439 Phalarops sp. 12



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TIME SPECIES # DIR. BAND NO. REMARKS

1441 Pomarine
Jaeger

1

1446 W. Gull

1

1450 C. Murre

1

1451 Sooty
Shear.

1

1452 G Murre

1

N. Phalarope

1

W. Gull

1

Sooty Shear

2

1455 C. Murre

1

W. Gull

1

1458 Sooty Shear

1

1500 W. Gull

3

1501 W. Gull

5

1504 W. Gull

1

1507 W. Gull

1

1508 W. Gull

1

1510 C. Murre

1

1513 P.f. Shear.

5

1515 N. Phalarope

4

W. Gull

1

1520 Sooty Shear.

1

1525 Marine
Mammals

~~30±5~~

1552 P.f. Shear.

2

1553 W. Gull

1

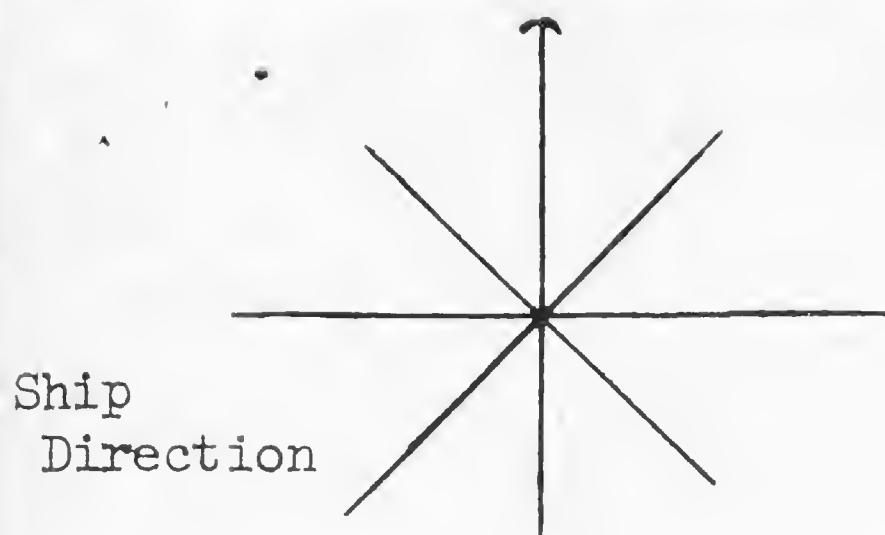
1556 W. Gull

1

with 1 dead fish and 2 sharks

sitting on H₂O

School of 30±5 Dall Porpoises - shot 1 but
it sank



SMITHSONIAN INSTITUTION
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AT SEA DAILY LOG - E

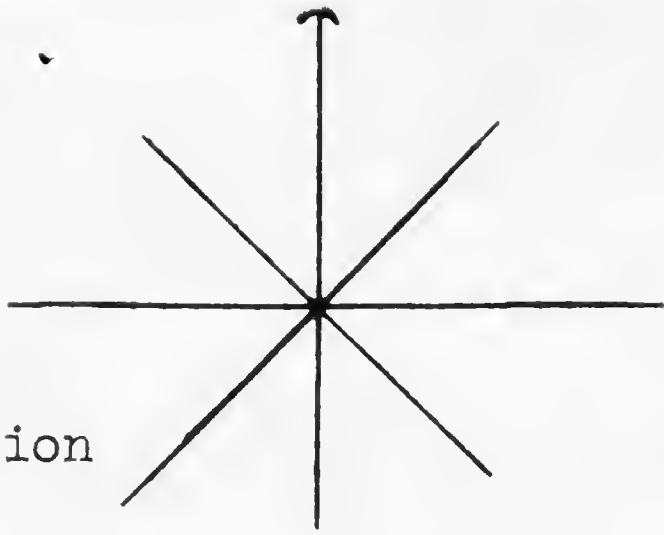
OBSERVERS:

Date 28 Sept. 1967
Pg. # 4

SPECIMEN
or

TIME SPECIES # DIR. BAND NO. REMARKS

1604	B. Pelican	1			} on H ₂ O near floating sea weed
	W. Gull	1			
	Sooty Shear	1			
1605	Sooty Shear	1			
1610	Sooty Shear.	500 ca.			} observed in large flock on water near floating vegetation, offshore well sighted approx. 4 mile from flock -
	P.F. Shear.	25			
	W. Gull	45			
	Marine Mammal	35			
1611	W. Gull	1			} marine mammals identified as California Sea Lions all mostly ⁴² and were closely associated in a pod. The birds were all around the submarines.
1612	W. Gull	1			
	Sooty Shear.	2			
1616	P.F. Shear.	6			
	W. Gull	3			
1620	W. Gull	2			
	P.F. Shear.	3			
1621	P.F. Shear.	30 ± 5			
1625	B. Pelican	2			
	Taeger sp.	1			
1626	Alcid	1			probably
1627	P.F. Shear.	2			
1629	P.F. Shear.	3			
1636	B. Pelican	2			
	P.F. Shear.	6			
	W. Gull	3			
1641	Heermann's / Calif. Gull	1			} Gull preyed upon by Sku
	Sku	1			



Ship
Direction

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DIVISION OF BIRDS
AT SEA DAILY LOG - E

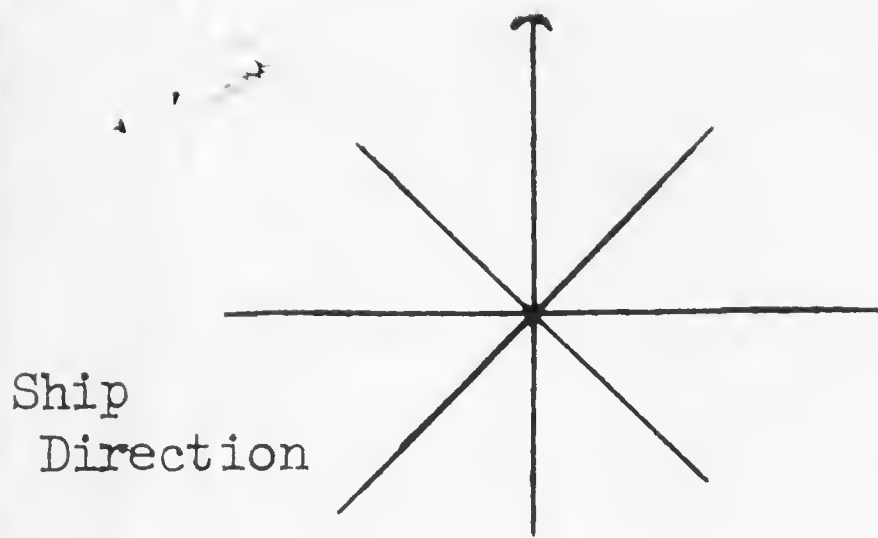
OBSERVERS:

Date 28 Sept. 67
Pg.# 5

SPECIMEN
or

ABD ✓

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
1645	Sooty Shear				
1648	P. C. Shear				
1651	New Zealand Shearwater				
1653	Black Petrel				
1701	Shear Petrel				
1711	W. gull				
1718	Cal/Hairy gull				
1735	Dull Porpoise	10	SE		behind the plankton net in that they show still & etc.
1730					



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

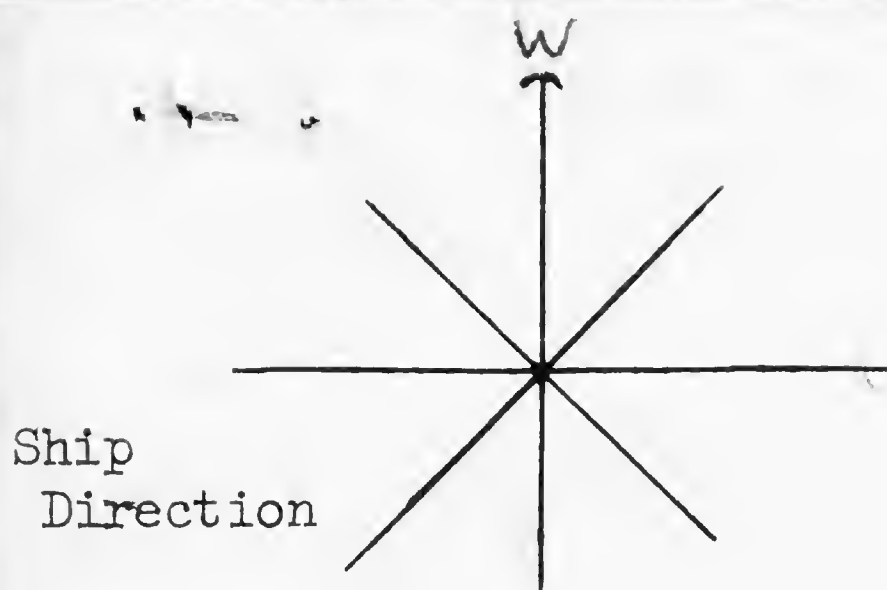
OBSERVERS:

Date 28 Sept
Pg.# 6

SPECIMEN
or

ADP ✓

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
1740	P.f. Shear.	4			
	W. Gull	5			
1743	W. Gull	2			
1746	W. Gull	3			
1750	Herring	4			
	Calif. Gull				
	W. Gull	5			
1802	P.f. Shear	1			
1803	W. Gull	1			
1840	W. Gull	1			



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

7-10 CHAN

10-12 JOHN

12

Date 29 SEPT. 67

Pg. # 1

SPECIMEN

or

TIME SPECIES # DIR. BAND NO. REMARKS

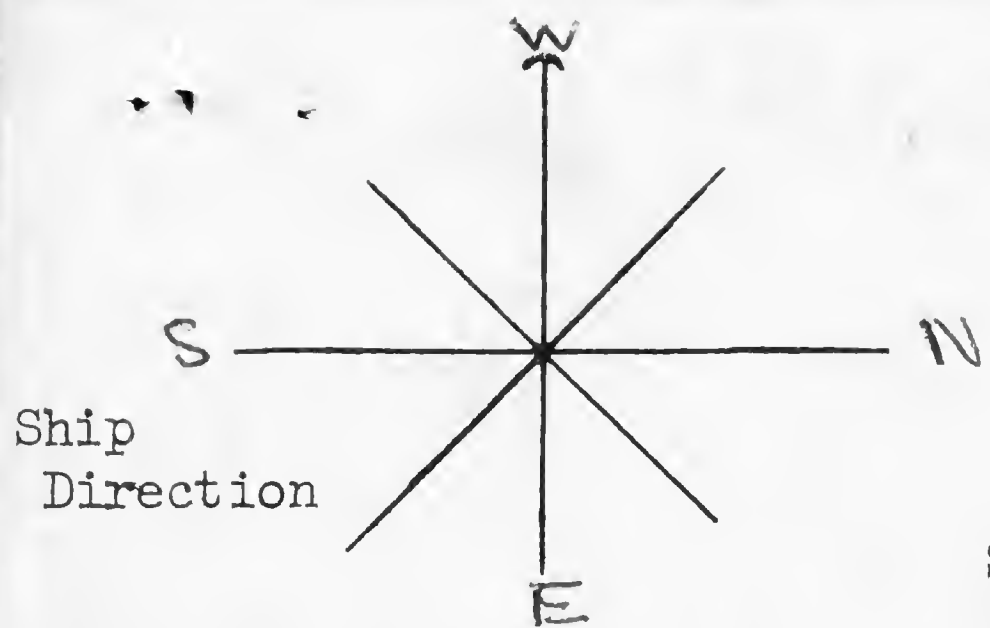
0700					SUNRISE BEGIN OBS.
0701	BFA	(1)	ce		dk following
0740	PINK FOOT	1	NW		
0742	PHAL. SP	1	ce		SLICK AREA W/MUCH BLACK FLOTSAM VEG. LOOKING CHUNKS, IN WINDROWS
0743	SOOTY SH	1	ce		
0744	BR. PEL.	1	ce		
0815	BFA	(2)	ce		dk both, following
0827	JAE. SP	1	W		PAR REL 2 Lt ph.
0835	TWEET	1	ce		WHIRBLER
0837	SOOTY SH	1	S		
0844	JAE. SP	1	ce		
0845	SOOTY SH	2	ce		
0847	BIRD	1	S		TERN/JAE. FLYING HI
0851	SOOTY SH	1	S		
0852	JAE. SP.	1	ce		
0927	RED PHAL	2	ce		ON SLICK
0928	SOOTY SH.	1	S		
0935	JAE. SP.	1	S		PAR. REL. 2 Lt ph.
0940	SOOTY SH.	1	S		
0941	STERNAS	3	S		ARCTIC?
0942	SOOTY SH	1	S		
0945					DELPHINS 3 - CA 50 DID NOT FOLLOW BOW
0953	BIRD	1	S		TERN/JAE.
1000	BLACK STP	1	ce		
1005	ALCID SP	3	ce		
1015	JAE. SP	1	ce		
	ALCID SP	1	ce		
1017	JAE. SP	1	ce		ON H ₂ O
1018	SOOTY SH.	1			
1019	" "	1			
1020	BLACK STP.	1			
1023	SOOTY SH.	1			

0700-0732 (3)

6 MI.

0733-1744 (2)

107 MI.



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

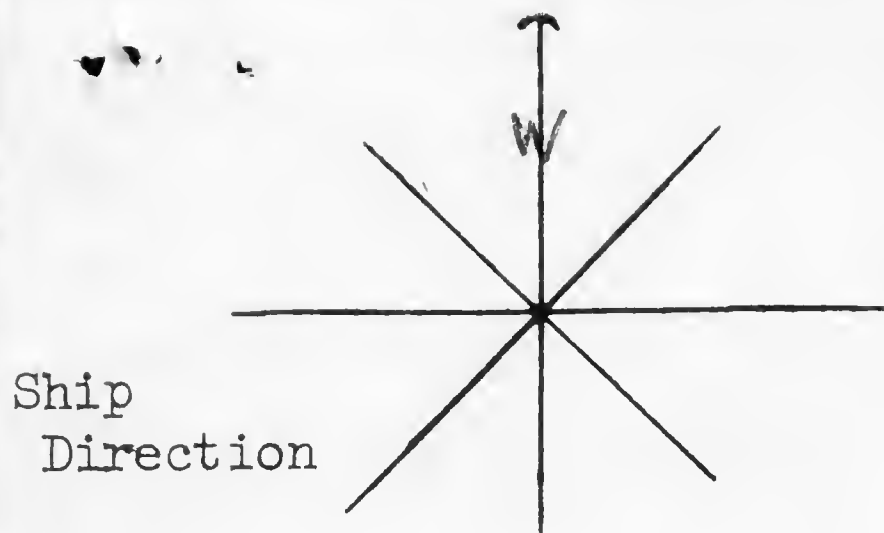
Date 29 SEPT
Pg.# 2

ADP ✓

SPECIMEN
or

TIME SPECIES # DIR. BAND NO. REMARKS

1027	JAE. SP	1	-		
	TERN SP	2	-		
1028	TERN SP	3	-		PINF. - 1
1034	" "	1	-		PH SP. - 1
1042	" "	6	S		SS - 15
1048	SOOTY SH	1	-		BR. PZ - 1
1100	TERN SP	1	-		J SP. - 8
1107	" "	1	-		THORNT - 1
1109	SOOTY SH	1	-		T/J - 2
1114	SKUA	1	S		RPH - 2
1132	WRSP	2	SW		TERN - 17
1300	WRSP	1	SW		BSP - 2
1305	WRSP	1	SW		ALCID - 4
1306	SKUA	1	N		SKUA - 2
1315	SKUA / Jaeger	1	N		WRSP - 15
1340	Jaeger	1	N		S/J - 2
1432	WRSP	1	SW		73 ✓
1445	WRSP	1	SW		Flashed from water.
1453	WRSP	1	SW		Flying close to H ₂ O - flew just ahead of ship for 5 minutes
1510	Sooty Sh.	1	N		in squall
1515	WRSP	1	W		
1536	WRSP	1	W		
1540					Stop for BT
1600					end BT
1619	WRSP	1	W		
1626	Skua / Jaeger sp.	1	N		
1636	Sooty Shear	1	NW		
1639	BFA	①	W		Following ship - joined first



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OBSERVERS:

Date 29 Sept. 1967
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ADP ✓

SPECIMEN

or

TIME SPECIES # DIR. BAND NO. REMARKS

1650	WRSP	1	S	
1704	WRSP	1	W	
1707	WRSP	1	☉	
1710	WRSP	2	☉	
1715	BFA	5	ce	
1758	WRSP	1	ce	
1805	STORM PET	1	ce	
1815	WRSP	1	ce	
	DRSP	1	ce	
1820	WRSP	2	ce	
1830	STORM PET	1	S	
1837	WRSP	1	WS	
1857	STORM PET	1	ce	
1908				

3 of 3 are dark

SS
1745-1908 ①

16 mi.

WRSP - 5

STORM - 3

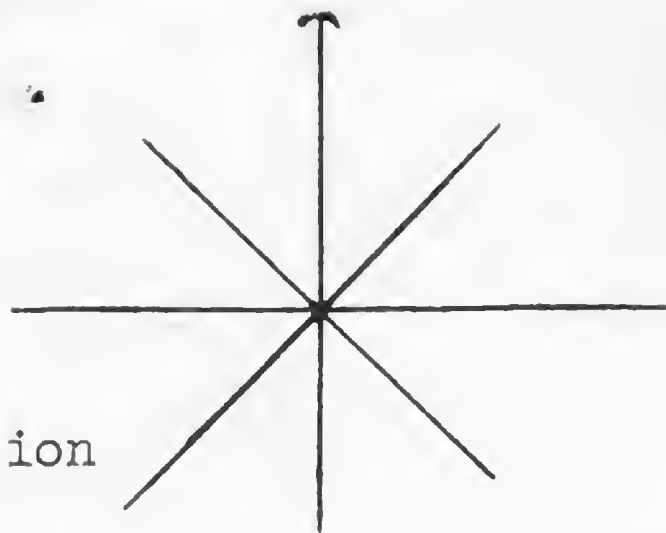
DRSP - 1

9 ✓

SUNSET CLOSE OBS.

10/11/2016

OBSERVERS:

Ship
Direction
 SMITHSONIAN INSTITUTION
 DIVISION OF BIRDS
 AT SEA DAILY LOG - E
SPECIMEN
orDate 30 SEPT 1967
Pg.# 1

TIME SPECIES # DIR. BAND NO. REMARKS

0717					SUNRISE
0718	SOOTY SH	1	∞		FLUSHED
0745	BFA	(2)	∞		1 mottled below dark above, 1 mottled below AND ABOVE
0755	WRSP	1	∞		
0807	JHEG-SP	1	S		
0827	STORM PET	1	S		
0847	" "	2	E		
0858	" "	1	SE		
0900	BFA	(1)	∞		WHITE ABOVE
0905	STORM PET	1	SE		
0917	Storm Pet.	1	E		
0922	WRSP	1	⊙		
0926	WRSP	1	⊙		
0938	WRSP	1	⊙		
0942	WRSP	1	⊙		
0948	BFA	(1)	⊙		
1005	BFA	(1)	⊙		joined 1st albatross following ship
1016	Storm Pet.	1	S		
1021	Storm Pet.	1	E		joined 2nd, total of three following ship.
1037	Sooty Shear.	1	E		
1138	WRSP	1	SW		
1143	RED PHAL	1	S		
1145	BFA	(5)	∞		1st 4 alk dh's have light heads (at BT DROP)
1235	DRSP	1	SW		
1247	WRSP	1	SW		
1309	WRSP	1	⊙		
1311	WRSP	1	⊙		
1316	WRSP	1	⊙		
1338	Sooty Shear	1	S		
1421	WRSP	1	S		

0717-1443 (1)

7.2 mi.

1444-1904 (2)

mi.

SS - 3

WRSP - 11

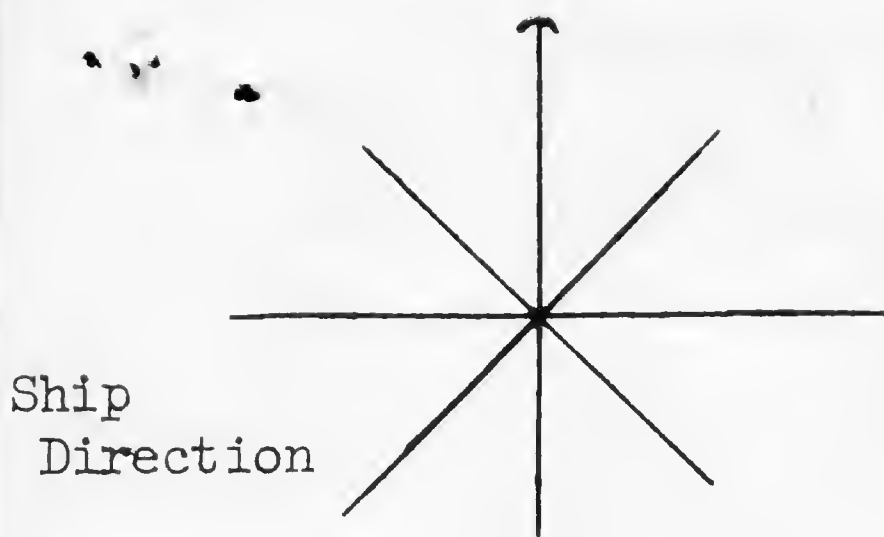
Jsp - 1

ST.PET - 9

RED PHAL - 1

DRSP - 1

20 ✓



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

Date 30 Sept. 1967
Pg. # 2

ADP ✓

SPECIMEN
or

TIME SPECIES # DIR. BAND NO. REMARKS

1441 Stormpet. 1 S possibly dark rumped

1545 BFA (5) ce 4 dr 1 lt BT COUNT BOTH VESSELS

1548 Stormpet. 1 ce

1606 WRSP 1 ce

1650 BFA (6) ce

1655 PHALSP 1 ce

1834 WRSP 1 S

1845 WRSP 1 S

1904 SONSET CLOSE OBS.

SS 1904

(2)

STORM PET - 1

WRSP - 3

PHALSP - 1

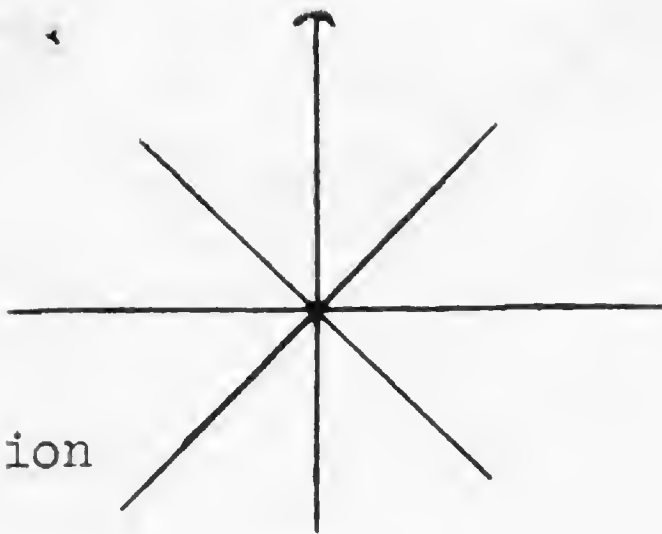
5 ✓

126°17'

$$\begin{array}{r} 124.0 \\ 105.0 \\ \hline 19.0 \\ 4 \\ \hline 23 \end{array}$$

$$\begin{array}{r} 17 \\ +8 \\ \hline 25 \\ 1 \\ \hline 26 \\ 4 \\ \hline 304 \end{array}$$

OBSERVERS:

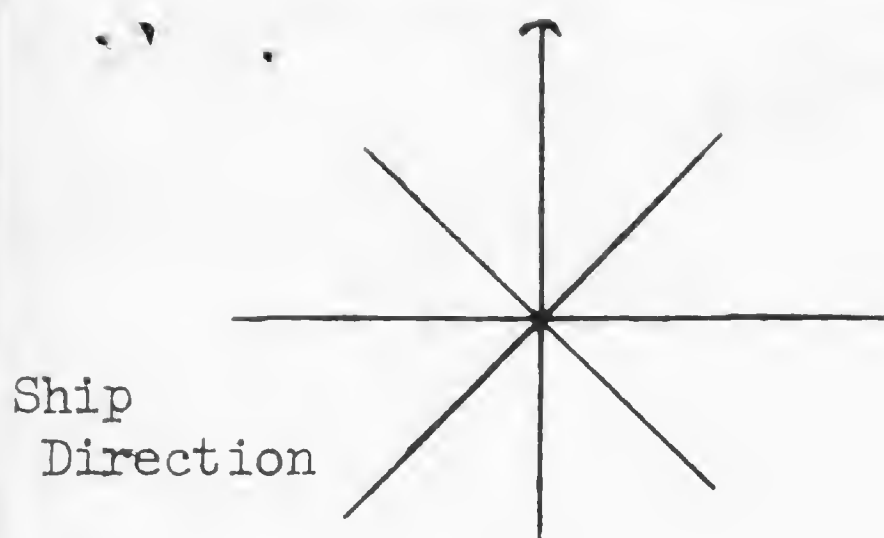
Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

SPECIMEN
orDate 1 OCT. 1967
Pg.# 1

TIME SPECIES # DIR. BAND NO. REMARKS

0701					SUNRISE ON THE "QUIET PACIFIC; BEGIN SCIENCE
0707	TERN/JAEG	1	cel		
0720	Phalarope sp.	1	S		30
0721	BFA	①	o		following ship 1440 190447
0726	Storm pet. sp.	1	S		
0728	JAEG. sp.	1	E		2
0738	SOOTY SH.	1	SW		arcing high in 30 kt. wind
0741	R. PHAL	1	cel		
0742	SHEAR/PET	1	S		large all dark - Palefoot ???
0743	SOOTY SH	1	S		
0750	TERN/JAEG	1	cel		
0800	SOOTY SH	3	SW		0701-0937 ③
0801	BIRD	1	cel		27 MI.
0803	SOOTY SH	1	SW		
0805	" "	1	SW		0938-1855 ⑥
0806	" "	3	SW		
0808	R PHAL	1	S		MOVING
0811	SOOTY SH	2	SW		③ 93 MI.
0815	" "	4	SW		T/J - 2
0816	" "	2	SW		PA sp. - 1
0819	" "	1	SW		ST PET. - 1
0820	" "	4	SW		J sp - 1
0820	R PHAL	1	S		SS - 35
0828	SOOTY SH.	2	SW		RPA. - 4
0829	TERN sp.	4	SE		S/P - 1
0830	SOOTY SH	1	SW		B - 1
0834	TERN sp	1	cel		TERN - 11
0836	" "	2	S		T/G - 5
0840	TERN/GULL	1	W		62 ✓
0844	TERN sp	4	S		
0845	SOOTY SH	4	SW		
0847	" "	3	SW		
0852	Tern/Gull	4	SW		
0854	Sooty Shear.	2	W		arcing high



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AT SEA DAILY LOG - E

OBSERVERS:

Date 1 OCT. 67
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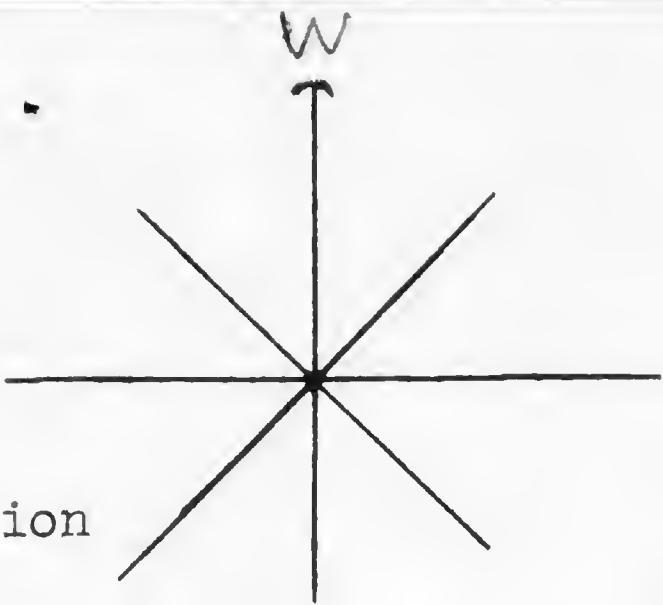
SPECIMEN
or

ADP ✓

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
0913	RPHAL	1	S		MOLTING
0943	Sooty Shear.	1	SW		Arising high - sooty underparts clearly visible
0955	BFA	(1)	⊙		Following ship
1010	P.F. Shear.	1	S		white underparts clearly visible
1014	WRSP	1	N		
1018	Tern sp.	1	SW		moving
1023	WRSP	1	SW		possibly same as 1014 sighting
1027	B. Pelican	2	N		Flushed from H ₂ O by ship
1029	WRSP	1	SW		(6)
1055	WRSP	1	S		
1110	Shear (Pet)	1	SW		all black, arising high
1111	WRSP	1	SW		
1115	Storm Pet.	1	S		dark rumped?
1135	WRSP	1	S		
1154	SOOTY SH	1	SW		
1207	Sooty SH.	1			
1209	Sooty Pet. Phal	1	W		
1215	R. Phal.	2	S		
1220	"	1	S		
1305	DRSP	1	SW		
1315	R. Phal.	1	S		
1356	SOOTY SH	1	SW		
1358	" "	1	SW		
1403	" "	1	SW		
1405	" "	1	SW		
1412	" "	1	SW		
1415	" "	2	SW		
1420	" "	1	SW		

SS-14
PINK-2
WRSP-11
TERN-1
B PEL-2
S/P-1
STORM-4
RPH.-5
DRSP-1
BIRD-2

43 ✓



Ship
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OBSERVERS:

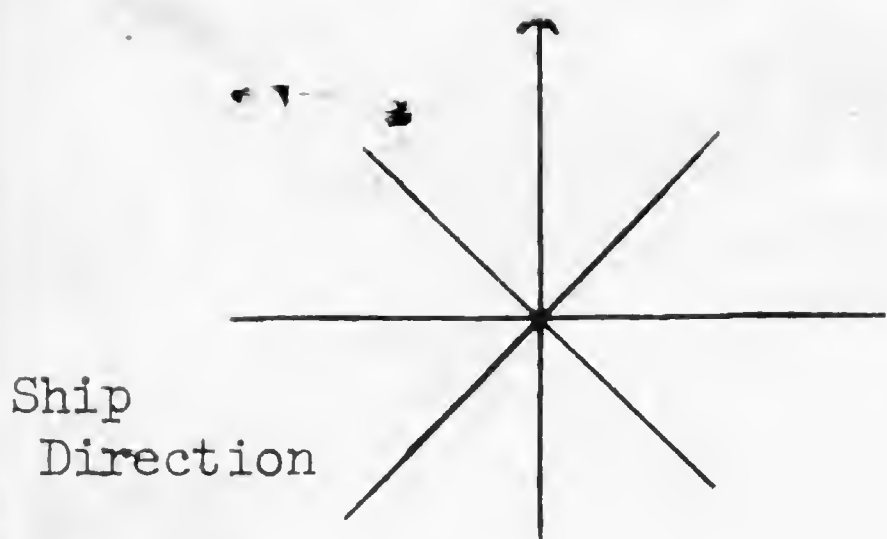
Date 1 Oct. 1967
Pg.# 3

SPECIMEN
or

ADP ✓

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
1426	Sooty Sh	1	SW		
1513	" "	1	SW		
1529	Bird	1	SW		
1539	Storm pet.	1	SW		
1613	Sooty Sh.	1	SW		
1621	Storm pet.	1	SW		
1653	Bird	1	SW		
1732	WRSP	1	W		
1735	P.F. shear	1	SW		
1736	Storm pet.	1	W		
1820	WRSP	1	SW		Dark rumped
1825	WRSP	2	S		white rump confirmed
1832	Marine Mammal				35±5 Rosy-bellied Porpoises 5 Dall Porpoises
1842	WRSP	1	W		
1855					Sunset

*Thought to be
Delphinus
Red 2 or 3
P. & Q.*



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

Date 2 October
Pg. # 1

SPECIMEN
or

TIME SPECIES # DIR. BAND NO. REMARKS

0715					SUNRISE BEGIN OBS.
0726	WRSP	1	ce		
0734	WRSP	1	88		
0735					WHALE 15007 - Hump / SPERM
0740	BFA	①	ce		dh
0745	SOOTY SH	2	S		
0748	STORM PET	1	ce		
0750	SOOTY SH	1	S		
0800	BFA				8 accumulated while making BT stop
0816	SOOTY SH	1	S		
0817	STORM PET	1	ce		
0830	SOOTY SH	1	?		
0844	" "	2	?		
0904	Sooty Shear	1	S		
0919	Sooty Shear	1	S		
0926	WRSP	1	S		
0929	Sooty Shear.	1	S		
0938	Turn sp.	1	W		on horizon
0950	WRSP	1	S		
0955	WRSP	1	S		
0957	Sooty Shear.	2	S		
1015	WRSP	1	S		
1023	Sooty Shear WRSP	1	S		dark underparts, white underwings, dark above with inverted "W" on back and wings
1031	Pinkrope sp	1	ce		
1038	WRSP	1	S		
1043	Sooty Shear	1	S		
1055	BFA	①	ce		Following ship (tot. 2)
1100					Made turn
1104	Sooty Shear	1	S		

WRSP - 14
SS - ~~14~~ 18
STORM - 2
TURN - 1
PHALOP - 1
SHOU - 1
GP - 1

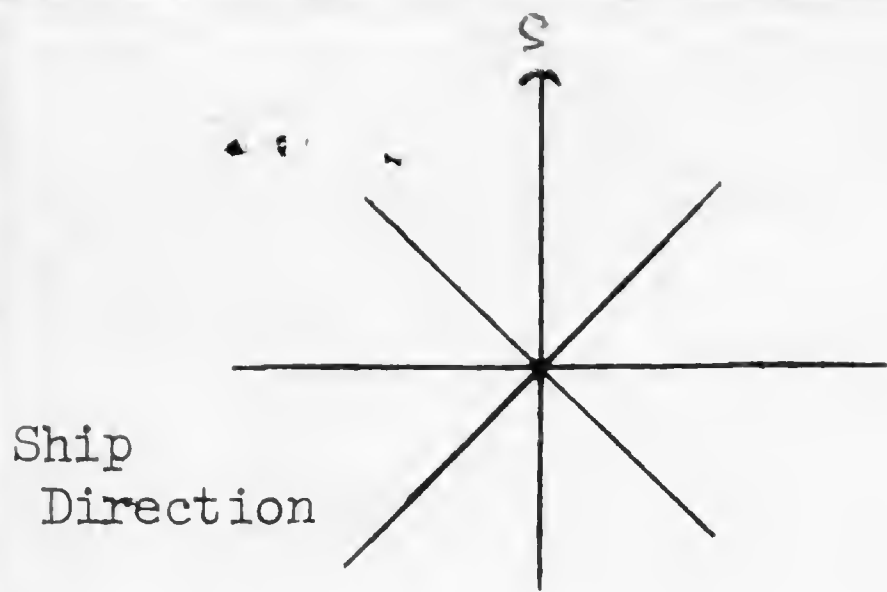
38 ✓

55A
 12

 675
 715

18
 808

 615
 615
 715



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

Date 20 Oct. 1967

Pg.# 2

ADP ✓

SPECIMEN
or

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
1200	BFA	(2)	ce		10 ch 2 lt
1340	WRSP	1	SE		
1605	WRSP	1	S		
1641	WRSP	1	S		SS-1905
1720	SOOTY SH	2	S		109 mi.
1747	" "	1	S		
1752	WRSP	1	S		COLLECTED AT 1900
1808	SHOVELER DUCK	1	ce		NON-BREED HEN PLUMAGE INVESTIGATED
1815	GOLDEN PLOV.	1	ce		SHIP called 2X NON-BREED PLUM. NO BLACK IN AXILLARIES
1836	WRSP	1	S		
1845	BFA	(14)			14 posn. prob upto 18
1900	WRSP	2			
1905					SUNSET CLOSE OBS.



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

Date 3 Oct 1967
Pg. # 1

SPECIMEN
or

TIME SPECIES # DIR. BAND NO. REMARKS

ADP ✓

0705 SR BEGIN OBS.

0720 BFA

(1)

following

0734 WRSP

1

SE

0705 -

(5)

0740 WRSP

1

SE

0802

0748 "

1

SE

10 MI. WRSP - 3
3 ✓

0800 BFA

(4)

SE

4 dh

0813 SOOTY SH

2

SE

0920 STORM PET

1

SE

0923 WRSP

1

SE

0935 TERN SP.

1

SE

arctic?

0950 SOOTY SH

1

S

0952 TERN SP

2

SE

1015 WRSP

1

S

(6)
TERN - 3
SS - 5

1026 Sooty Shear

1

SE

1032 WRSP

1

S

STORM - 2

1041 Storm pet.

1

SE

WRSP - 15

1104 WRSP

1

S

DRSP - 1

1109 WRSP

2

S

JSP - 1

1139 WRSP

1

SE

R PHAL - 1

1142 "

1

SE

ALCID - 1

29 ✓

1200 210

BT drop

1215 WRSP

1

SE

1236 WRSP

1

SE

1255 WRSP

1

SE

1325 WRSP

1

SE

1428 DRSP

1

SE

1506 WRSP

1

SE

1528 SOOTY SH

1

SW

1536 JAEGSP

1

S

Pom. ? et. ph.

1558 RED PHAL

1

NE

0803 - (6)

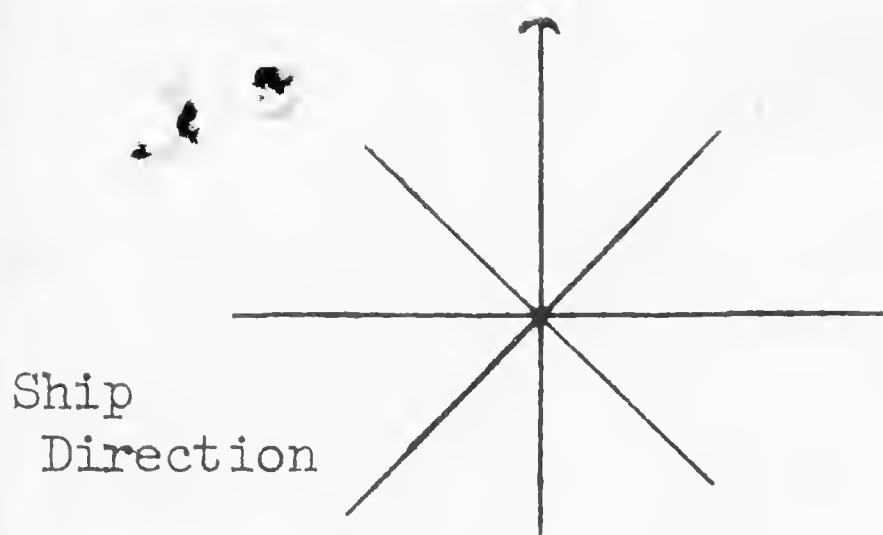
1734

93 MI.

1735-1849 (9)

14 MI. B STRET - 1
WRSP - 1
SS - 1
3 ✓

Handwritten notes and calculations, including a large '100' and various numbers and symbols.



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

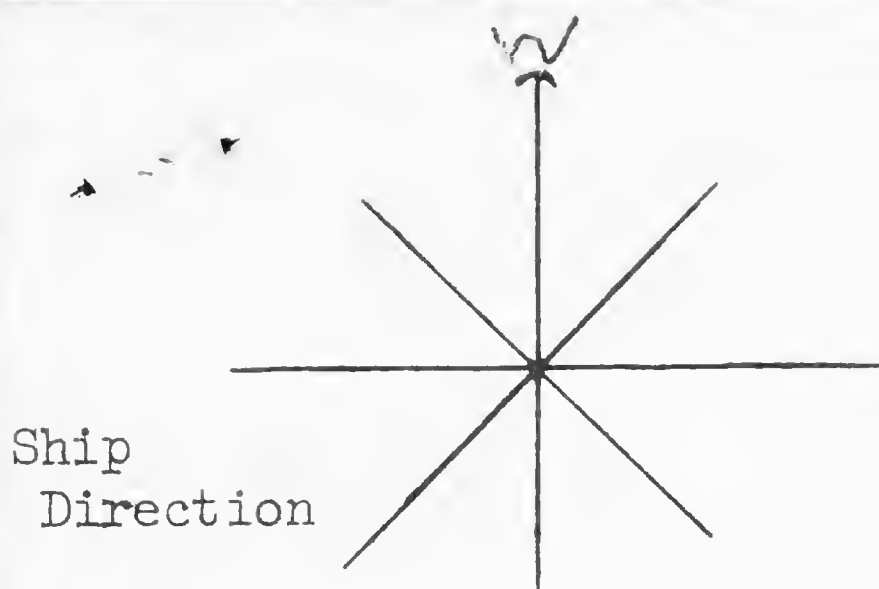
OBSERVERS:

Date 30 OCT '67
Pg.# 2

SPECIMEN
or

TIME SPECIES # DIR. BAND NO. REMARKS

1600	BFA	(7)	ce		6 dh 1 mottled
1642	WRSP	(ce		
1721	WRSP	1	S		SS 1849
1729	Alcid sp.	1			sitting on log
1748	Black Pet.	1	S		
1832	WRSP	1	S		
1838	Sooty Shear	1	SE		
1848	BFA	(7)	o		in H ₂ O around object in water - ^{dead} porpoise possibly (total of 7 BFA following ship)
1849					SUNSET CLOSE ON!



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

Date 4 Oct. 67
Pg. # 1

SPECIMEN
or

TIME SPECIES # DIR. BAND NO. REMARKS

0710 _____ SONRISE BEGIN OBS.

0740 BFA (1) _____ following.

0850 " (4) _____ Total 2

0920 WRSP 2 *887*

0926 WRSP 1 *W*

0934 BFA (2) (1)

0942 WRSP 1 (1) following ship (total of 4)

0950 Shearwater sp. 1 *W* on horizon, moving

1002 WRSP 1 *S*

1011 WRSP 1 *S*

1015 WRSP 1 *SW*

1024 WRSP 1 *S*

1031 WRSP 1 (1)

1038 WRSP 1 *S*

1045 WRSP 1 *S*

1050 WRSP 1

1054 Storm pet. (1) sitting on H₂O, flushed by ship

1117 WRSP 1 *N*

1128 WRSP 1 *S*

1145 WRSP 1 *W*

1150 BFA (4) (2) 1 lt 3 dh.

1220 WRSP 4 (2) all together

1230 " 1 (2)

1232 " 1 (2)

1235 " 2 *S*

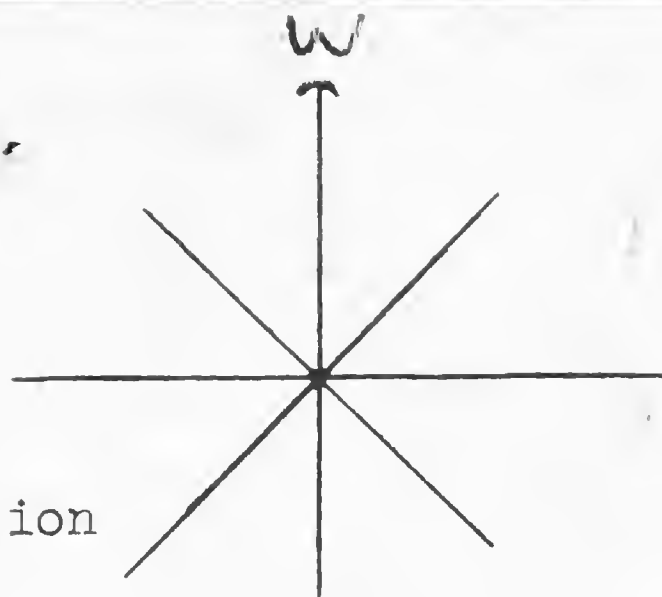
1238 Sooty SH 1 *S*

1242 WRSP 1 (2)

WRSP - 39
SH sp - 1
STORM - 13
SS - 1

49 ✓

Ship
Direction



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

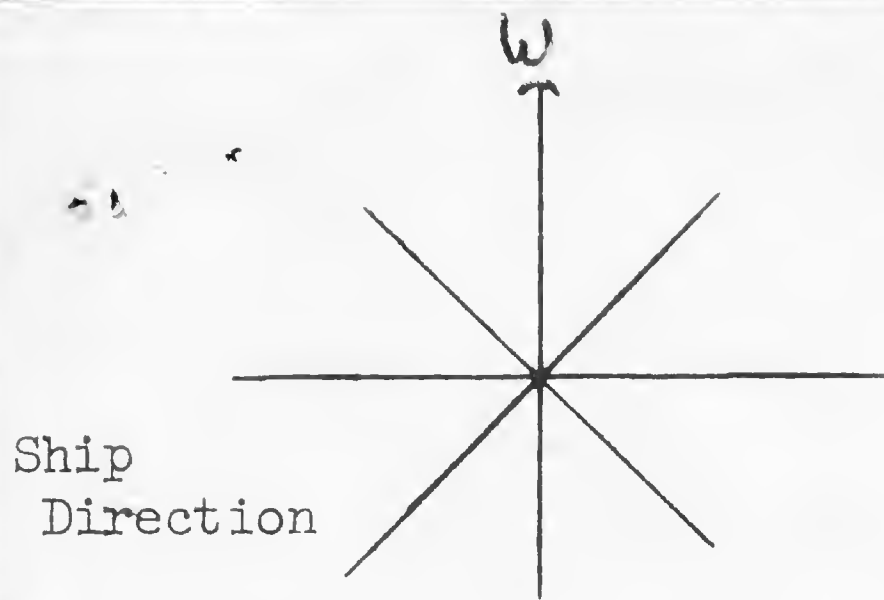
OBSERVERS:

Date OCT 67
Pg. # 2

SPECIMEN
or

TIME SPECIES # DIR. BAND NO. REMARKS

1248	STORM PET	1	002		SOME SEVERAL AMOUNTS OF LOGS AND NON MOTILE OBJECTS HERE ABOUT.
1250	WRSP	1	002		
1305	"	1	002		0710-1510 (8) 84 mi.
1307	STORM PET	1	002		
1312	WRSP	3	S		1511-1709 (7) 41 mi.
1327	STORM PET	1	S		
1330	"	2	S		
1333	WRSP	1	S		
1337	STORM PET	1	S		
1341	" "	6	S		
1429	WRSP	1	S		VERITABLY, ONLY FEW TO NEVER SEEN LOGS AND CONSUMATORY WRSP OVER LAST 45 MIN.
1437	WRSP	1	S		
1500	WRSP	1	88		
1505	"	1	88		
1517	Sooty Shear	1	S		
1540	WRSP	1	88		
1600	WRSP	2	88		
1610	WRSP	2	S		
1611	"	1	88		
1612					PCA - 0/1w 3
1640	Sooty Shear	1	S		
1648	WRSP	1	0		
1704	WRSP	1	0		
1711	WRSP	1	0		



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

Date 4 October, 67
Pg.# 3

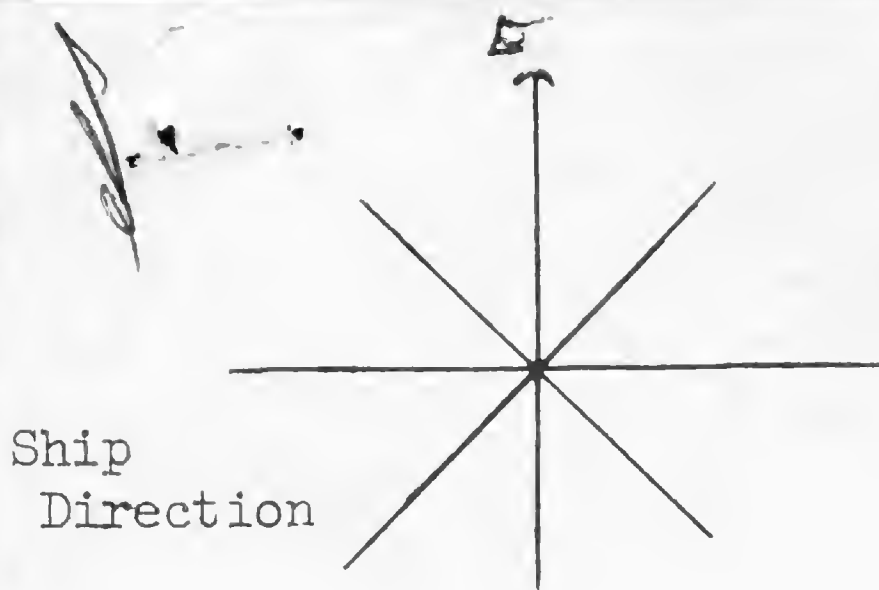
SPECIMEN
or

ADP ✓

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
1711	WRSP	1	⊙		
1730	Sooty Shear	1	SW		
1746	WRSP	1	SW NW		
1755	"	1	SW		
1756	Sooty Shear	1	S		
1830	Storm Pet	2	S		
1833	Sooty Shear	1	SW		
1845	WRSP	1	S		
1846	Sooty Shear	1	S		
1848	WRSP	1	SW		
1904	SUNSET CLOSE OBS.				

SS-6
WRSP-13
STORM-2

21 ✓



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

Date 5 Oct. 1967
Pg.# 1

SPECIMEN
or

141101

TIME SPECIES # DIR. BAND NO. REMARKS

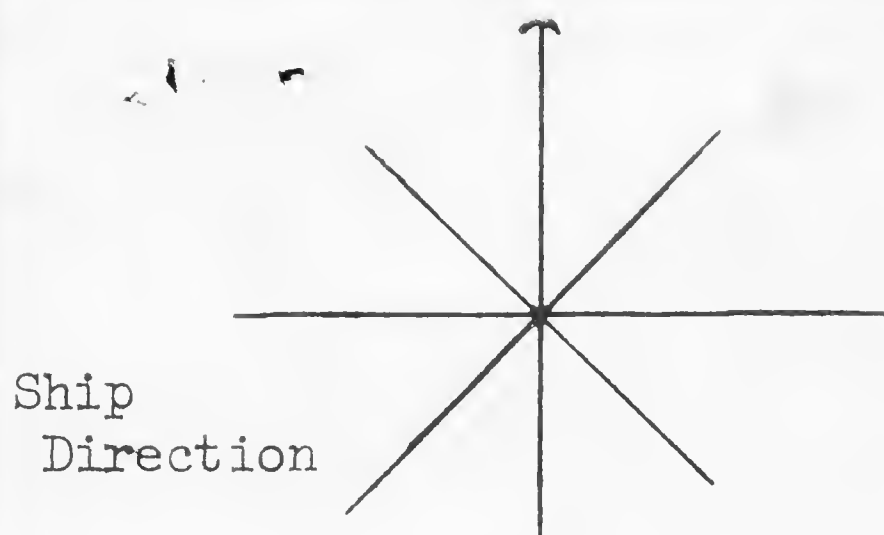
0719					OPEN OBS. SUNRISE
0737	STORM PET	1	S		SCATTERED CLOUDS NW 10-15 NO FEW
0800	BFA	①	SE		WHITE CAPS FLYING FISH
0835	WRSP	1	S		CONSPICUOUS
0856	STORM PET	1	S		
0858	" "	1	SE		
0907	WRSP	2	?		
1000					No birds since 915 but a few flying
1025	WRSP	1	S		<u>2</u> fsh. STORM - 3
1048	"	1	S		WASP - 7
1100	"	1	S		<u>10</u> ✓
1149	"	1	SW		
1205	BFA				stop for BT drop
1208	Coast Hawk	①	SW		total of 2 following ship, both dark phase
1220					flying high, not attracted to tug
1231	WRSP	1	S		begin moving observational endeavors anew
1258	WRSP	1	⊙		
1310	" "	1	S		
1324	WRSP	1	SE		
1345	WRSP	1	SE		
1415	WRSP	1	SE		
1500	"	1	S		1150-1856 ⑧
1512	"	1			64 MI.
1530	1550				flushed from water.
30-46°					Tursiops - ca 30 animals. large animals.
124-11'W					Not clearing water. Were riding swells, i.e. looking
					a mile as a surfer does. They (over)

broke water by swimming through the surf then diving exposing
 only dorsal. Dorsals large. Pod did not come to bow when
 chased the pod split. We finally got a very good look at two
 of the animals. Identification positive.

1952

67
 60/407
 360
 470
 420

76
 647
 8247



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

Date 5 Oct 67
Pg.# 2

SPECIMEN
or

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
1657	WRSP	1	cel		SS - 1856
1702	"	1	cel		
1712	"	1	cel		
1717	"	1	cel		
1758	Sooty Shear	1	⊙		
1759	R. Phalarope	1	⊙		
1801	Tern sp.	1	SE		
1811	WRSP	1	N		
1850	Sooty Shear	1	S		
1855	WRSP	1	SE		
1856	WRSP	1	⊙		
1856	Sunset				

R.C.
C.P.W.
~~L.P.C.~~
✓ W.K.
✓ G.S.
✓ A.A.

PRELIMINARY REPORT

EASTERN AREA CRUISE NO. 25
Eastern Grid Survey No. 14

28 September - 5 October 1967

Prepared by
Robert L. DeLong

00000044

EASTERN AREA CRUISE No. 25
Eastern Grid Survey No. 14

28 September - 7 October 1967

Personnel: R. L. DeLong (Biologist-in-charge)
Richard D. Chandler
John Fitch

Itinerary: 28 September 1100 Depart Treasure Island, San Francisco
29 September 0440 Enter Eastern Grid at Pt. Ash
6 October 0830 Depart Eastern Grid at Pt. Oak
7 October 0730 Arrive Long Beach

Methods:

Observations were made from a light tug during this survey. During periods of moderate, choppy seas which prevailed through most of the survey, observations were taken from the lee wing of the pilot house. On 4 October when seas and winds moderated observations were held from the flying bridge. No nocturnal observations were taken.

Bathythermograph casts were made at four hour intervals in the grid area.

Two departures were made from the normal grid track. On 2 October 25 miles were cut from the western end of east-west legs 3 and 4. Again on 3 October it became necessary to divert south of the normal track of east-west by 4 to avoid an area in the Pacific Missile Range where there was an apparent firing firing (see Figure).

Acknowledgments:

Fine cooperation was received from Captain Frazier and crew members of the boat. A special thanks is extended to R. Cordinier who as a volunteer made the trip to serve as aerographer and to make B-T casts. Also Capt. Frazier is given special thanks as he participated in nearly every B-T cast during the entire trip.

The B-T winch was furnished by Naval Electronics Laboratory in San Diego. A special thanks goes to Mr. George Schaffer of that organization who had the winch serviced and delivered to the boat.

Vessel Considerations:

The light tugs used in the survey worked well, i.e., they completed the grid and the work was done. However due to their size and, more important, their characteristics at sea, the quantitative survey data are not believed "good" (accurately indicative of actual numbers). This

was caused by observers being restricted to the lee side of the pilot house as frequently the windward side was taking heavy spray. This effectively limited the angle of observation; created a blind spot of 90-135 degrees, i.e., the horizon was cut by one-third. Also due to the fast, erratic, and severe motion of the vessel in even moderate seas the observer is not able to use field glasses extensively to scan the horizon. This greatly lessens his radius of visibility which in turn causes him to record fewer birds.

Were heavy seas (10+ ft) encountered during a survey on these vessels, observations would have to be secured as all hatches are then secured as green water covers the pilot house. Even in more moderate seas if the vessel is headed directly into the sea the same "wet" conditions result.

Over 826 miles and 82.8 hours of diurnal observation, 390 birds of 13 species* were recorded. One bird (a Shoveler) was collected. The low number of land birds recorded is thought to indicate lack of attraction to the small vessel. However it is possible this marks the end of their migration/dispersion movements.

Synoptic highlights:

- 1) High numbers of migrating Sooty Shearwaters.
- 2) Increase in "Leach's" Storm Petrel numbers over last survey and their apparent southern migration.
- 3) Continued low number of phalaropes.
- 4) Only one land bird recorded.
- 5) Few marine mammals recorded.

Black-footed Albatross 40

'	7	'	5	'	6	'
'	14	'	4	'	8	'
'	4	'	5	'	7	'
'		'		'		'

The number of albatross recorded on this cruise compares favorably with that of the last three cruises. This strongly suggests that albatross do follow small vessels as readily as they do larger vessels. (the previous three surveys were taken from a 400+ ft. vessel).

There is no apparent explanation for the occurrence of the 14 recorded albatross in sector 4.

On 34 of the total 40 albatross, rumpcolor was recorded; the breakdown follows:

Dark rumped	28	(82 %)
White rumped	4	(12 %)
Mottled rump	2	(6 %)

*Albatross are not included in either of these totals.

Pink-footed Shearwater 3

One bird was seen on 29 September in Sector 2, and two birds were recorded 1 October in Sector 6.

Sooty Shearwater 100

During this and the last survey Sooty Shearwaters have been moving through the grid area. The general movement is toward the southwest. A few birds seen in the western section of the northern and central sections are moving south. These birds may join the south-western "stream" of birds or may represent a separate movement. The movements around Point Conception where there are concentrations of the birds show the southwest movement but there is a possible funneling of birds to this area as though it were a jumping off point for migration.

That there are still large numbers of sooties north of Point Conception at this time and that we have not recorded great concentrations in migration, suggests that this migration occurs slowly in a "piece meal" fashion. This is unlike the Slenderbill Shearwater migrations in the Central Pacific where we have massive flocks moving fast through the area. Sooty Shearwaters have been recorded sitting on the water in the grid during the past two surveys.

Leach's (type) Storm Petrel

White-rumped Storm Petrels	147
Dark-rumped Storm Petrels	4
Storm Petrel sp.	40
	<hr/> 191

Numbers have increased over the last survey. Many of the birds recorded during this survey were moving north. This movement was direct and rapid and is undoubtedly a migration. There was an increased population of these south-moving birds with brilliant white rumps. This strongly suggests that the birds moving south through the area at this time are birds from northern breeding populations rather than a final southward movement of southern birds that moved northward through the area on earlier surveys this summer.

Black Petrel 3

Again on this survey as on Eastern Grid Survey 13, a few birds of this species were recorded.

Brown Pelican 3

The appearance of this coastal bird is significant. That one bird was seen in Sector 2 at 35°00'N, 122°45'W demonstrates the ability of these birds to go to sea over a hundred miles from land. The other birds were seen in Sector 6 within 70-100 miles from the Channel Islands. All three birds probably represent birds that were based in the Channel Islands during the past breeding season.

Golden Plover 1

One bird was recorded on 2 October at 32°32'N, 125°31'W in Sector 4.

Phalarope

		1	'	4	'	5	'
Red Phalarope	14	1	'	0	'	6	'
Phalarope sp.	4	0	'	1	'	0	'

The Phalaropes, in very low density, were moving south; undoubtedly in migration.

Jaeger/Skua

Jaeger sp.	11
Skua	2
Jaeger/Skua	2

Eighty percent of the Jaeger/Skuas were recorded in Sector 2 on 29 September. These birds are very abundant to the north from Monterey Bay south at this time. Thus it is to be expected that they occur primarily in the northern sector of the grid.

Tern sp. 34

0	'	17	'	11	'
1	'	0	'	4	'
0	'	1	'	0	'

As can be readily seen over 80 percent of the terns were recorded in the north east and north central sectors. The numbers recorded during this survey represent an almost 200 percent drop in numbers over last survey. These birds may represent the last of the Arctic Terns migrating south.

Alcid 5

0	'	4	'	0
0	'	0	'	1
0	'	0	'	0

These birds were probably Xantus Murrelets or Cassin's Auklets. The distribution of these small alcids has been the same over the summer and fall.

Accidentals:

Shoveler 1

One shoveler was collected at 32°32'N, 122°53'W in Sector 4. This bird was a lone immature female. The bird flew around the ship before collection.

Warbler sp.? 1

One possible warbler was recorded in Sector 2.

Grid Mammals

Mammal densities have dropped fantastically during the last two surveys. Hopefully the significance of this population density change will become clear upon later analysis of these mammal data.

1 October 1832 hours 33°21'N, 122°38'W Delphinus 35± Rel. 2

1 October 1832 hours 33°21'N, 122°38'W Dall Porpoise 5 Rel. 2

2 October 0740 hours 33°16'N, 125°22'W Whale 1 sperm/humpback

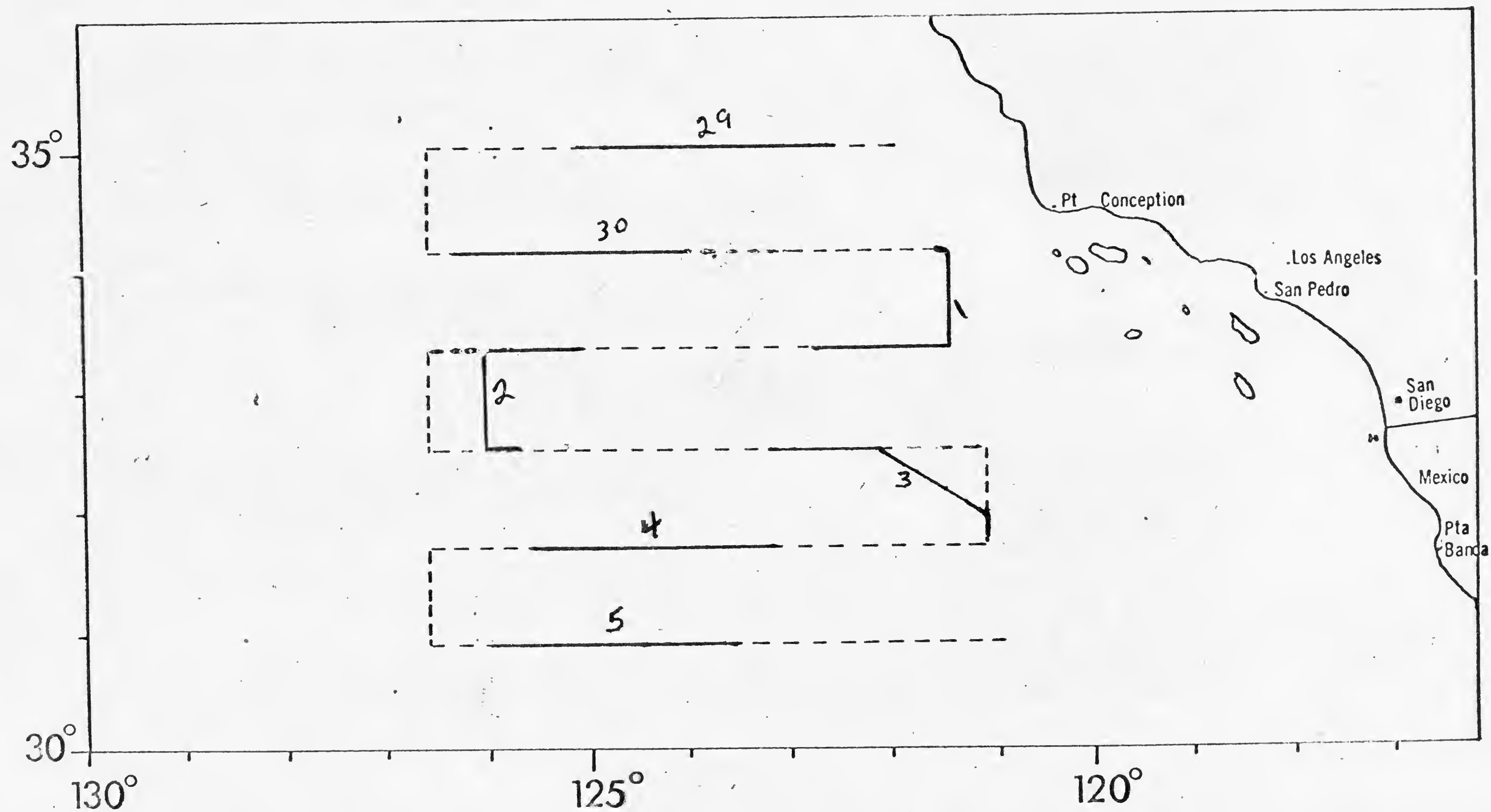
5 October 1530 hours 30°46'N, 124°10'W Tursiops 30 - Chased and seen well; see notes.

Non-Grid:

Non-grid observations are limited to the afternoon of 28 September from San Francisco Bay 63 miles south to 37°N latitude. Densities were fantastically high in this area with ca. 16 birds per linear mile. Sooty Shearwaters accounted for about 75 percent of the birds recorded. A large flock of ca. 500 sooties were associated with a pod of about 35 Zalophus. New Zealand and Pink-footed Shearwaters were also abundant in this area. Common Murres, small Alcids, Western and Herring/California Gulls, Cormorants and Brown Pelicans were the other common birds seen in this area.

Figure 1.

EASTERN GRID CRUISE TRACK



EASTERN AREA CRUISE NO. 25
 EASTERN GRID SURVEY NO. 14
 DATES 29 Sept - 5 Oct 1967

--- ACTUAL CRUISE TRACK
 (Nocturnal)
 — ACTUAL CRUISE TRACK
 (Diurnal)

Eastern Grid Survey # 14

Table 1. Daily Summary of Diurnal Observations

Date	# Miles	# Hours	# Birds	# Species	Linear Density
29 Sept.	129	12.1	82	11	.635
30 Sept.	114	11.8	31	4	.272
1 Oct.	120	11.9	105	7	.875
2 Oct.	109	11.8	38	6	.348
3 Oct.	117	11.7	35	7	.299
4 Oct.	125	11.9	70	2	.560
5 Oct.	112	11.6	29	4	.259
Total	826	82.8	390	13	.472
Av./day	118	11.8	51	5.9	-

Eastern Grid Survey # 14

Table 2. Summary of Diurnal Observations by Species

	Number Observations	% Total Birds	Number Collected	Number Sera Samples
Sooty Shearwater	100	25.6		
Pink-footed Shearwater	3	0.8		
Shearwater sp.	1	0.3		
Shearwater/Petrel	2	0.5		
Total Shearwater Petrel 106		27.2		
White-rumped Storm Petrel	147	37.7		
Dark-rumped Storm Petrel	4	1.0		
Storm Petrel sp.	40	10.3		
Black Storm Petrel	3	0.8		
Total Storm Petrel 194		49.8		
Brown Pelican	3	0.8		
Golden Plover	1	0.3		
Red Phalarope	14	3.7		
Phalarope sp.	4	1.0		
Total Shorebirds 19		4.9		
Jaeger sp.	11	2.8		
Skua	2	0.5		
Skua/Jaeger	2	0.5		
Tern sp.	34	8.7		
Tern/Jaeger	4	1.0		
Tern Gull	5	1.3		
Total Tern/Jaeger/Skua/Gull 58		14.9		
Alcid sp.	5	1.3		
Shoveler	1	0.3	1	
Passerine sp.	1	0.3		
Bird sp.	3	0.8		
TOTALS	390	100	1	0

Eastern Grid Survey # 14
29 Sept. - 5 Oct. 1967

Table 3. Linear Density and Abundance of species by sub-division.

	N												C											
	1	2	3	1-2-3	4	5	6	4-5-6																
Sooty Shearwater	.034	3	.101	15	1.061	35	.196	53	.165	18			.102	19	.123	37								
Pink-footed Shearwater			.007	1			.004	1					.011	2	.007	2								
Other Shearwater Petrels				.030	1	.004	1						.005	1	.003	1								
Black Storm Petrel			.013	2			.007	2																
"Leach" Storm Petrel	.341	30	.128	19	.030	1	.185	50	.147	16	.300	3	.183	34	.176	53								
Brown Pelican			.007	1			.004	1					.011	2	.007	2								
Golden Plover							.009	1							.003	1								
Phalaropes	.011	1	.020	3	.152	5	.033	9	.009	1			.038	7	.029	8								
Jaeger sp.	.011	1	.054	8	.030	1	.037	10					.005	1	.003	1								
Skua			.013	2			.007	2																
Tern sp.			.114	17	.333	11	.104	28	.009	1			.021	4	.017	5								
Other Charadriiformes			.027	4	.212	7	.041	11																
Alcid sp.			.027	4			.015	4					.005	1	.003	1								
Shoveler								.009	1						.003	1								
Passerine sp.			.007	1			.004	1																
Bird sp.				.030	1	.004	1						.011	2	.007	2								
Total Birds	.398	35	.516	77	1.880	62	.645	174	.349	38	.300	3	.392	73	.379	114								
# Miles	88		149		33		270		109		10		186		305									
# Hours	8.8		14.5		3.1		26.4		11.8		1.0		18.8		31.6									

(continued on next page)

Eastern Grid Survey # 14
29 Sept. - 5 Oct. 1967

Table 3. Linear Density and Abundance of species by sub-division.

(continued)

	7		8		9		S 7-8-9		W 1-4-7		C 2-5-8		E 3-6-9		TOTAL	
Sooty Shearwater	.068	6	.020	3	.071	1	.040	10	.094	27	.060	18	.236	55	.133	100
Pink-footed Shearwater											.003	1	.009	2	.004	3
Other Shearwater Petrels			.007	1			.004	1			.003	1	.009	2	.004	3
Black Storm Petrel					.071	1	.004	1			.007	2	.004	1	.004	3
"Leach" Storm Petrel	.280	25	.418	62	.071	1	.351	88	.248	71	.279	84	.154	36	.232	191
Brown Pelican											.003	1	.009	2	.004	3
Golden Plover									.004	1					.001	1
Phalaropes			.007	1			.004	1	.007	2	.013	4	.051	12	.022	18
Jaeger sp.									.004	1	.027	8	.009	2	.013	11
Skua											.007	2			.002	2
Tern sp.			.007	1			.004	1	.004	1	.060	18	.064	15	.041	34
Other Charadriiformes											.013	4	.030	7	.013	11
Alcid sp.											.013	4	.004	1	.006	5
Shoveler									.004	1					.001	1
Passerine sp.											.003	1			.001	1
Bird sp.													.013	3	.004	3
Total Birds	.348	31	.459	68	.214	3	.406	102	.364	104	.491	148	.593	138	.472	390
# Miles	89		148		14		251		286		307		233		826	
# Hours	8.4		15.1		1.3		24.8		29.0		30.6		23.2		82.8	

DEPARTMENT OF THE NAVY
SHIP WEATHER OBSERVATION SHEET

USS _____ DATE (GMT) Friday 29 Sept 19 67
AT/PASSAGE FROM _____ TO _____

TABLE I

TIME (GMT)	WINDS <input type="checkbox"/> IF ESTIMATED		VISI- BIL- ITY (Miles)	WEATHER (Symbols)	BAROMETER (Inches)	TEMPERATURE (Degrees and tenths)		CLOUDS			SEA WATER TEMP. (Degrees and tenths)	SEA WAVES			SWELL WAVES		
	Direction (True)	Force (Knots)				Dry Bulb	Wet Bulb	Amount (Tenths)	Height	Type		Direction (True)	Period (Seconds)	Height (Feet)	Direction (True)	Period (Seconds)	Height (Feet)
00																	
01																	
02																	
03																	
04																	
05																	
06																	
07																	
08																	
09																	
10																	
11																	
12	340	10	10	ovc	29.90	69	65	9	1500	50/cu	66	345		1	345	4sec	3-5
13																	
14																	
15																	
16	340	12	10	sc	29.89	68	64	8	1000	50/50 cu	66	345		1	345	3sec	3-5
17																	
18																	
19																	
20	340	14	10	ovc	29.92	66	63	10	1000	50/50	66	345		1-2	345	3sec	5-6
21																	
22																	
23																	

TABLE II
SYNOPTIC OBSERVATIONS

FIRST GROUP OF MESSAGE	Day of Week (1-7) (GMT)	POSITION OF SHIP			TIME (GMT)	Total Cloud Amt. (Coded)	WIND		Visi- bil- ity (90-99)	WEATHER		PRESSURE	AIR TEMP. (°C)	CLOUDS					Course of Ship (0-9)	Speed of Ship (0-9)	3-HOUR PRESSURE TENDENCY		SIGNIFICANT CLOUD			
		Oc- tant (0-3) (5-8)	Lotitude (Degrees and tenths)	Longitude (Degrees and tenths)			Direction (True) (00-36)	Speed (True) (Knots)		Present (00-99)	Past (0-9)	Barometer Corrected (Mb)		Amount of Low Cloud	Type of C _L (0-9)	Height of Low Cloud	Type of C _M (0-9)	Type of C _H (0-9)			Characteristic (0-8)	Amount of Change (Mb and tenths)	Indicator	Amount (Eights)	Type	Height
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
	Y	Q	L ₃ L _n L _o	L _o L _o L _o	GG	N	dd	ff	VV	ww	W	ppp	TT	N _h	C _L	h	C _M	C _H	D _s	V _s	a	pp	8	N _s	C	h _s h _s
SHIP					00																		8			
SHIP					06																		8			
SHIP					12																		8			
SHIP					18																		8			

Indicator	AIR- SEA DIFF. (Coded)	DEW POINT (°C)	SEA WAVES				SWELL WAVES				ICE ACCRETION				SEA ICE						DO NOT TRANSMIT		
			Indicator	Direction (Coded)	Period (Coded)	Height (Coded)	Indicator	Direction (Coded)	Period (Coded)	Height (Coded)	Indicator	Source	Thickness	Rate	Indicator	Kind	Effect	Bearing	Distance	Orientation	Dry Bulb (Degrees and tenths)	Wet Bulb (Degrees and tenths)	Sea Water Temp. (Degrees and tenths)
28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	A ₁	A ₂	A ₃
0	T _s T _s	T _d T _d	1	d _w d _w	P _w	H _w	1	d _w d _w	P _w	H _w	2	I _s	E _s E _s	R _s	ICE	C ₂	K	D _i	r	e	Celsius	Celsius	Celsius
0			1				1				2				ICE								
0			1				1				2				ICE								
0			1				1				2				ICE								
0			1				1				2				ICE								

DEPARTMENT OF THE NAVY
SHIP WEATHER OBSERVATION SHEET

USS _____ DATE (GMT) FRIDAY 6 OCT 19 67
AT/PASSAGE FROM _____ TO _____

TABLE I

TIME (GMT)	WINDS <input type="checkbox"/> IF ESTIMATED		VISI- BIL- ITY (Miles)	WEATHER (Symbols)	BAROMETER (Inches)	TEMPERATURE (Degrees and tenths)		CLOUDS			SEA WATER TEMP. (Degrees and tenths)	SEA WAVES			SWELL WAVES		
	Direction (True)	Force (Knots)				Dry Bulb	Wet Bulb	Amount (Tenths)	Height	Type		Direction (True)	Period (Seconds)	Height (Feet)	Direction (True)	Period (Seconds)	Height (Feet)
00	130	14	10	clr	30.10	65	63	1	2000	cu	66	000	3	3	030	3	4
01																	
02																	
03																	
04																	
05																	
06																	
07																	
08																	
09																	
10																	
11																	
12																	
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	

TABLE II
SYNOPTIC OBSERVATIONS

FIRST GROUP OF MESSAGE	Day of Week (1-7) (GMT)	POSITION OF SHIP			TIME (GMT)	Total Cloud Amt. (Coded)	WIND		Visi- bil- ity (90-99)	WEATHER		PRESSURE	AIR TEMP. (°C)	CLOUDS					Course of Ship (0-9)	Speed of Ship (0-9)	3-HOUR PRESSURE TENDENCY		SIGNIFICANT CLOUD			
		Occi- tant (0-3) (5-8)	Latitude (Degrees and tenths)	Longitude (Degrees and tenths)			Direction (True) (00-36)	Speed (True) (Knots)		Present (00-99)	Post (0-9)			Amount of Low Cloud (0-9)	Type of CL (0-9)	Height of Low Cloud (0-9)	Type of CM (0-9)	Type of CH (0-9)			Characteristic (0-8)	Amount of Change (Mb and tenths)	Indicator	Amount (Eights)	Type	Height
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
	Y	Q	L _s L _n L _o	L _o L _o L _o	GG	N	dd	ff	VV	ww	W	ppp	TT	N _h	C _L	h	C _M	C _H	D _s	V _s	a	pp	8	N _s	C	h _s h _s
SHIP					00																		8			
SHIP					06																		8			
SHIP					12																		8			
SHIP					18																		8			

Indicator	AIR- SEA DIFF. (Coded)	DEW POINT (°C)	SEA WAVES				SWELL WAVES				ICE ACCRETION				SEA ICE						DO NOT TRANSMIT		
			Indicator	Direction (Coded)	Period (Coded)	Height (Coded)	Indicator	Direction (Coded)	Period (Coded)	Height (Coded)	Indicator	Source	Thickness	Rate	Indicator	Kind	Effect	Bearing	Distance	Orientation	Dry Bulb (Degrees and tenths)	Wet Bulb (Degrees and tenths)	Sea Water Temp. (Degrees and tenths)
28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	A ₁	A ₂	A ₃
0	T _s T _s	T _d T _d	1	d _w d _w	P _w	H _w	1	d _w d _w	P _w	H _w	2	I _s	E _s E _s	R _s	ICE	C ₂	K	D _i	r	e	Celsius	Celsius	Celsius
0			1				1				2				ICE								
0			1				1				2				ICE								
0			1				1				2				ICE								
0			1				1				2				ICE								

DEPARTMENT OF THE NAVY
SHIP WEATHER OBSERVATION SHEET

USS _____ DATE (GMT) Tuesday 5 Oct 19 67
AT/PASSAGE FROM _____ TO _____

TABLE I

TIME (GMT)	WINDS <input type="checkbox"/> IF ESTIMATED		VISI- BIL- ITY (Miles)	WEATHER (Symbols)	BAROMETER (Inches)	TEMPERATURE (Degrees and tenths)		CLOUDS			SEA WATER TEMP. (Degrees and tenths)	SEA WAVES			SWELL WAVES		
	Direction (True)	Force (Knots)				Dry Bulb	Wet Bulb	Amount (Tenths)	Height	Type		Direction (True)	Period (Seconds)	Height (Feet)	Direction (True)	Period (Seconds)	Height (Feet)
00	190	7	10	CLR	30.01	65	63	2	1500	SC	66	180	-	1	280	350	3
01																	
02																	
03																	
04					None												
05																	
06																	
07																	
08	200	12	10	CLR	30.11	68	64	2	1600		68	360			070		3
09																	
10																	
11																	
12	030	10	10	CLR	30.12	70	68	1	2500	AC	66	000	-	2	000	3	3
13																	
14																	
15																	
16	005	12	10	SC	30.18	71	69	5	2500	CU	68	030	-	2	035	3	3
17																	
18																	
19																	
20	000	18	10	CLR	30.08	68	66	0	-	-	68	010	-	2	010	350	3
21																	
22																	
23																	

TABLE II
SYNOPTIC OBSERVATIONS

FIRST GROUP OF MESSAGE	Day of Week (1-7) (GMT)	POSITION OF SHIP			TIME (GMT)	Total Cloud Amt. (Coded)	WIND		Visi- bil- ity (90-99)	WEATHER		PRESSURE	AIR TEMP. (°C)	CLOUDS					Course of Ship (0-9)	Speed of Ship (0-9)	3-HOUR PRESSURE TENDENCY		SIGNIFICANT CLOUD			
		Occi- tant (0-3) (5-8)	Latitude (Degrees and tenths)	Longitude (Degrees and tenths)			Direction (True) (00-36)	Speed (True) (Knots)		Present (00-99)	Post (0-9)			Borometer Corrected (Mb)	Amount of Low Cloud	Type of C _L (0-9)	Height of Low Cloud	Type of C _M (0-9)			Type of C _H (0-9)	Characteristic (0-8)	Amount of Change (Mb and tenths)	Indicator	Amount (Eights)	Type
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
	Y	Q	L ₃ L ₂ L ₀	L ₀ L ₀ L ₀	GG	N	dd	ff	VV	ww	W	ppp	TT	N _h	C _L	h	C _M	C _H	D _s	V _s	a	pp	8	N _s	C	h _s h _s
SHIP					00																		8			
SHIP					06																		8			
SHIP					12																		8			
SHIP					18																		8			

Indicator	AIR-SEA DIFF. (Coded)	DEW POINT (°C)	SEA WAVES				SWELL WAVES				ICE ACCRETION				SEA ICE						DO NOT TRANSMIT		
			Indicator	Direction (Coded)	Period (Coded)	Height (Coded)	Indicator	Direction (Coded)	Period (Coded)	Height (Coded)	Indicator	Source	Thickness	Rate	Indicator	Kind	Effect	Bearing	Distance	Orientation	Dry Bulb (Degrees and tenths)	Wet Bulb (Degrees and tenths)	Sea Water Temp. (Degrees and tenths)
28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	A ₁	A ₂	A ₃
0	T _s T _s	T _d T _d	1	d _w d _w	P _w	H _w	1	d _w d _w	P _w	H _w	2	I _s	E _s E _s	R _s	ICE	C ₂	K	D _i	r	e	Celsius	Celsius	Celsius
0			1				1				2				ICE								
0			1				1				2				ICE								
0			1				1				2				ICE								
0			1				1				2				ICE								

DEPARTMENT OF THE NAVY
SHIP WEATHER OBSERVATION SHEET

USS _____ DATE (GMT) Wednesday 4 Oct 19 67
AT/PASSAGE FROM _____ TO _____

TABLE I

TIME (GMT)	WINDS <input type="checkbox"/> IF ESTIMATED		VISI- BIL- ITY (Miles)	WEATHER (Symbols)	BAROMETER (Inches)	TEMPERATURE (Degrees and tenths)		CLOUDS			SEA WATER TEMP. (Degrees and tenths)	SEA WAVES			SWELL WAVES		
	Direction (True)	Force (Knots)				Dry Bulb	Wet Bulb	Amount (Tenths)	Height	Type		Direction (True)	Period (Seconds)	Height (Feet)	Direction (True)	Period (Seconds)	Height (Feet)
00	280	5	10	CLR	29.99	65	62	0	—	—	66	270	—	1	000	3sec	3
01																	
02																	
03																	
04	X					X		None			X						
05																	
06																	
07																	
08	270	6	10	CLR	30.01	66	63	—	—	—	66				000	3sec	3
09																	
10																	
11																	
12	140	6-8	10	CLR	30.02	76	68	0			66	300	—	1	300	9sec	5-7
13																	
14																	
15																	
16	300	6-8	10	CLD	30.00	72	69				66	330		3	000	—	3-5
17																	
18																	
19																	
20	210	4	8	ovc	30.01	72	71	10	1000	SC	66	210	—	1	280	3sec	3-6
21																	
22																	
23																	

TABLE II
SYNOPTIC OBSERVATIONS

FIRST GROUP OF MESSAGE	Day of Week (1-7) (GMT)	POSITION OF SHIP			TIME (GMT)	Total Cloud Amt. (Coded)	WIND		Visi- bil- ity (90-99)	WEATHER		PRESSURE	AIR TEMP. (°C)	CLOUDS					Course of Ship (0-9)	Speed of Ship (0-9)	3-HOUR PRESSURE TENDENCY		SIGNIFICANT CLOUD			
		Oc- tant (0-3) (5-8)	Latitude (Degrees and tenths)	Longitude (Degrees and tenths)			Direction (True) (00-36)	Speed (True) (Knots)		Present (00-99)	Past (0-9)			Barometer Corrected (Mb)	Amount of Low Cloud	Type of C _L (0-9)	Height of Low Cloud	Type of C _M (0-9)			Type of C _H (0-9)	Characteristic (0-8)	Amount of Change (Mb and tenths)	Indicator	Amount (Eights)	Type
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
	Y	Q	L _s L _n L _a	L _o L _o L _o	GG	N	dd	ff	VV	ww	W	ppp	TT	N _h	C _L	h	C _M	C _H	D _s	V _s	a	pp	8	N _s	C	h _s h _s
SHIP					00																		8			
SHIP					06																		8			
SHIP					12																		8			
SHIP					18																		8			

Indicator	AIR- SEA DIFF. (Coded)	DEW POINT (°C)	SEA WAVES				SWELL WAVES				ICE ACCRETION				SEA ICE						DO NOT TRANSMIT		
			Indicator	Direction (Coded)	Period (Coded)	Height (Coded)	Indicator	Direction (Coded)	Period (Coded)	Height (Coded)	Indicator	Source	Thickness	Rate	Indicator	Kind	Effect	Bearing	Distance	Orientation	Dry Bulb (Degrees and tenths)	Wet Bulb (Degrees and tenths)	Sea Water Temp. (Degrees and tenths)
28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	A ₁	A ₂	A ₃
0	T _s T _s	T _d T _d	1	d _w d _w	P _w	H _w	1	d _w d _w	P _w	H _w	2	I _s	E _s E _s	R _s	ICE	C ₂	K	D _i	r	e	Celsius	Celsius	Celsius
0			1				1				2				ICE								
0			1				1				2				ICE								
0			1				1				2				ICE								
0			1				1				2				ICE								

DEPARTMENT OF THE NAVY
SHIP WEATHER OBSERVATION SHEET



USS _____ DATE (GMT) _____ 19 _____
AT/PASSAGE FROM _____ TO _____

TABLE I

TIME (GMT)	WINDS <input type="checkbox"/> IF ESTIMATED		VISI- BIL- ITY (Miles)	WEATHER (Symbols)	BAROMETER (Inches)	TEMPERATURE (Degrees and tenths)		CLOUDS			SEA WATER TEMP. (Degrees and tenths)	SEA WAVES			SWELL WAVES		
	Direction (True)	Force (Knots)				Dry Bulb	Wet Bulb	Amount (Tenths)	Height	Type		Direction (True)	Period (Seconds)	Height (Feet)	Direction (True)	Period (Seconds)	Height (Feet)
00	040	14	8	ovc	29.93	65	63	10	1000	st	66	000	-	2 ft	280	3 sec	3 ft
01																	
02																	
03																	
04																	
05																	
06																	
07																	
08	020	12	8	ovc	29.90	66	64	10	1000	st/sc	66	005	-	1-2	000	4 sec	3 ft
09																	
10																	
11																	
12	010	14	10	str	29.96	67	64	4	1000	sc/cw	66	005	-	1-2	000	4 sec	3-5 ft
13																	
14																	
15																	
16	000	10	10	str	29.94	67.5	64.5	4	1000	cw	66	000		1-2	000	4 sec	3-5
17																	
18																	
19																	
20	X																
21																	
22																	
23																	

TABLE II
SYNOPTIC OBSERVATIONS

FIRST GROUP OF MESSAGE	Day of Week (1-7) (GMT)	POSITION OF SHIP			TIME (GMT)	Total Cloud Amt. (Coded)	WIND		Visi- bil- ity (90-99)	WEATHER		PRESSURE	AIR TEMP. (°C)	CLOUDS					Course of Ship (0-9)	Speed of Ship (0-9)	3-HOUR PRESSURE TENDENCY		SIGNIFICANT CLOUD			
		Occ- tant (0-3) (5-8)	Latitude (Degrees and tenths)	Longitude (Degrees and tenths)			Direction (True) (00-36)	Speed (True) (Knots)		Present (00-99)	Post (0-9)			Barometer Corrected (Mb)	Amount of Low Cloud	Type of C _L (0-9)	Height of Low Cloud	Type of C _M (0-9)			Type of C _H (0-9)	Characteristic (0-8)	Amount of Change (Mb and tenths)	Indicator	Amount (Eights)	Type
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
	Y	Q	L ₁ L ₂ L ₃	L ₄ L ₅ L ₆	GG	N	dd	ff	VV	ww	W	ppp	TT	N _h	C _L	h	C _M	C _H	D _s	V _s	a	pp	8	N _s	C	h _s h _s
SHIP					00																		8			
SHIP					06																		8			
SHIP					12																		8			
SHIP					18																		8			

Indicator	AIR- SEA DIFF. (Coded)	DEW POINT (°C)	SEA WAVES				SWELL WAVES				ICE ACCRETION				SEA ICE					
			Indicator	Direction (Coded)	Period (Coded)	Height (Coded)	Indicator	Direction (Coded)	Period (Coded)	Height (Coded)	Indicator	Source	Thickness	Rate	Indicator	Kind	Effect	Bearing	Distance	Orientation
28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
0	T _s T _s	T _d T _d	1	d _w d _w	P _w	H _w	1	d _w d _w	P _w	H _w	2	I _s	E _s E _s	R _s	ICE	C ₂	K	D _i	r	e
0			1				1				2				ICE					
0			1				1				2				ICE					
0			1				1				2				ICE					
0			1				1				2				ICE					

DO NOT TRANSMIT		
Dry Bulb (Degrees and tenths)	Wet Bulb (Degrees and tenths)	Sea Water Temp. (Degrees and tenths)
A ₁	A ₂	A ₃
Celsius	Celsius	Celsius

DEPARTMENT OF THE NAVY
SHIP WEATHER OBSERVATION SHEET



USS _____ DATE (GMT) _____ 19 _____
AT/PASSAGE FROM _____ TO _____

TABLE I

TIME (GMT)	WINDS <input type="checkbox"/> IF ESTIMATED		VISI- BIL- ITY (Miles)	WEATHER (Symbols)	BAROMETER (Inches)	TEMPERATURE (Degrees and tenths)		CLOUDS			SEA WATER TEMP. (Degrees and tenths)	SEA WAVES			SWELL WAVES		
	Direction (True)	Force (Knots)				Dry Bulb	Wet Bulb	Amount (Tenths)	Height	Type		Direction (True)	Period (Seconds)	Height (Feet)	Direction (True)	Period (Seconds)	Height (Feet)
00	350	8	10	CLR	29.93	65	62	0	—		66	350		1	350	3 sec	3
01																	
02																	
03																	
04																	
05																	
06																	
07																	
08	260	10	10		29.36	69	67	3	1000	Cum	68	300		1	300		3-5
09																	
10																	
11																	
12	250	14	10	CLR	29.87	72	69	2	1000	AC/AS	68	280	-	1	310	4 sec	3-6
13																	
14																	
15																	
16	250	10	10	CLR	29.86	71	68	2	1000	CW	68	280	-	1	300	4 sec	3-5
17																	
18																	
19																	
20	270	12	10	OVC	29.86	68	65	9	1000	50%+	67	270	-	1	280	4 sec	3-6
21																	
22																	
23																	

TABLE II
SYNOPTIC OBSERVATIONS

FIRST GROUP OF MESSAGE	Day of Week (1-7) (GMT)	POSITION OF SHIP			TIME (GMT)	Total Cloud Amt. (Coded)	WIND		Visi- bil- ity (90-99)	WEATHER		PRESSURE	AIR TEMP. (°C)	CLOUDS					Course of Ship (0-9)	Speed of Ship (0-9)	3-HOUR PRESSURE TENDENCY		SIGNIFICANT CLOUD			
		Occu- tant (0-3) (5-8)	Latitude (Degrees and tenths)	Longitude (Degrees and tenths)			Direction (True) (00-36)	Speed (True) (Knots)		Present (00-99)	Past (0-9)			Barometer Corrected (Mb)	Amount of Low Cloud	Type of C _L (0-9)	Height of Low Cloud	Type of C _M (0-9)			Type of C _H (0-9)	Characteristic (0-8)	Amount of Change (Mb and tenths)	Indicator	Amount (Eights)	Type
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
	Y	Q	L ₁ L ₂ L ₃	L ₄ L ₅ L ₆	GG	N	dd	ff	VV	ww	W	ppp	TT	N _h	C _L	h	C _M	C _H	D _s	V _s	a	pp	8	N _s	C	h _s h _s
SHIP					00																		8			
SHIP					06																		8			
SHIP					12																		8			
SHIP					18																		8			

Indicator	AIR-SEA DIFF. (Coded)	DEW POINT (°C)	SEA WAVES				SWELL WAVES				ICE ACCRETION				SEA ICE						DO NOT TRANSMIT		
			Indicator	Direction (Coded)	Period (Coded)	Height (Coded)	Indicator	Direction (Coded)	Period (Coded)	Height (Coded)	Indicator	Source	Thickness	Rate	Indicator	Kind	Effect	Bearing	Distance	Orientation	Dry Bulb (Degrees and tenths)	Wet Bulb (Degrees and tenths)	Sea Water Temp. (Degrees and tenths)
28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	A ₁	A ₂	A ₃
0	T _s T _s	T _d T _d	1	d _w d _w	P _w	H _w	1	d _w d _w	P _w	H _w	2	I _s	E _s E _s	R _s	ICE	C ₂	K	D _i	r	e	Celsius	Celsius	Celsius
0			1				1				2				ICE								
0			1				1				2				ICE								
0			1				1				2				ICE								
0			1				1				2				ICE								

24 hr. forcut as soon as they get it.

DEPARTMENT OF THE NAVY
SHIP WEATHER OBSERVATION SHEET

USS _____ DATE (GMT) Sunday 1, Oct 19 67
AT/PASSAGE FROM _____ TO _____

TABLE I

TIME (GMT)	WINDS <input type="checkbox"/> IF ESTIMATED		VISI- BIL- ITY (Miles)	WEATHER (Symbols)	BAROMETER (Inches)	TEMPERATURE (Degrees and tenths)		CLOUDS			SEA WATER TEMP. (Degrees and tenths)	SEA WAVES			SWELL WAVES		
	Direction (True)	Force (Knots)				Dry Bulb	Wet Bulb	Amount (Tenths)	Height	Type		Direction (True)	Period (Seconds)	Height (Feet)	Direction (True)	Period (Seconds)	Height (Feet)
00	355	22	10	CLR	29.98	65	63	-	-	-	66	350		1-2	350	3sec	5-7
01																	
02																	
03																	
04																	
05																	
06																	
07																	
08	350	26	10	scT	29.90	69	66	3	1600	CU	68	340		1-2	340	3sec	6-10
09																	
10																	
11																	
12	350	22	10	CLR	29.92	66	64				66	345		1-2	340	3sec	8-12
13																	
14																	
15																	
16	350	18	10	scT	29.89	66	63	5	10000	AS/CS	66	345		1	345	3sec	6-8
17																	
18																	
19																	
20	350	16	10	scT	29.86	64	62	5	10000	AS/CS	66	345		1	345	3sec	5-7
21																	
22																	
23																	

TABLE II
SYNOPTIC OBSERVATIONS

FIRST GROUP OF MESSAGE	Day of Week (1-7) (GMT)	POSITION OF SHIP			TIME (GMT)	Total Cloud Amt. (Coded)	WIND		Visi- bil- ity (90-99)	WEATHER		PRESSURE	AIR TEMP. (°C)	CLOUDS					Course of Ship (0-9)	Speed of Ship (0-9)	3-HOUR PRESSURE TENDENCY		SIGNIFICANT CLOUD			
		Oc- tant (0-3) (5-8)	Latitude (Degrees and tenths)	Longitude (Degrees and tenths)			Direction (True) (00-36)	Speed (True) (Knots)		Present (00-99)	Past (0-9)			Barometer Corrected (Mb)	Amount of Low Cloud	Type of C _L (0-9)	Height of Low Cloud	Type of C _M (0-9)			Type of C _H (0-9)	Characteristic (0-8)	Amount of Change (Mb and tenths)	Indicator	Amount (Eights)	Type
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
	Y	Q	L ₃ L ₂ L ₁	L ₀ L ₀ L ₀	GG	N	dd	ff	VV	ww	W	ppp	TT	N _h	C _L	h	C _M	C _H	D _s	V _s	a	pp	8	N _s	C	h _s h _s
SHIP					00																		8			
SHIP					06																		8			
SHIP					12																		8			
SHIP					18																		8			

Indicator	AIR- SEA DIFF. (Coded)	DEW POINT (°C)	SEA WAVES				SWELL WAVES				ICE ACCRETION				SEA ICE					
			Indicator	Direction (Coded)	Period (Coded)	Height (Coded)	Indicator	Direction (Coded)	Period (Coded)	Height (Coded)	Indicator	Source	Thickness	Rate	Indicator	Kind	Effect	Bearing	Distance	Orientation
28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
0	T _s T _s	T _d T _d	1	d _w d _w	P _w	H _w	1	d _w d _w	P _w	H _w	2	I _s	E _s E _s	R _s	ICE	C ₂	K	D _i	r	e
0			1				1				2				ICE					
0			1				1				2				ICE					
0			1				1				2				ICE					
0			1				1				2				ICE					

DO NOT TRANSMIT		
Dry Bulb (Degrees and tenths)	Wet Bulb (Degrees and tenths)	Sea Water Temp. (Degrees and tenths)
A ₁	A ₂	A ₃
Celsius	Celsius	Celsius

DEPARTMENT OF THE NAVY
SHIP WEATHER OBSERVATION SHEET

USS _____ DATE (GMT) Saturday 30 Sept 19 67
AT-PASSAGE FROM _____ TO _____

TABLE I

TIME (GMT)	WINDS <input type="checkbox"/> IF ESTIMATED		VISI- BIL- ITY (Miles)	WEATHER (Symbols)	BAROMETER (Inches)	TEMPERATURE (Degrees and tenths)		CLOUDS			SEA WATER TEMP. (Degrees and tenths)	SEA WAVES			SWELL WAVES		
	Direction (True)	Force (Knots)				Dry Bulb	Wet Bulb	Amount (Tenths)	Height	Type		Direction (True)	Period (Seconds)	Height (Feet)	Direction (True)	Period (Seconds)	Height (Feet)
00	340	10	10	CLR	29.94	66	64	5	1500	SC	66	345		1	345	3sec	3-4
01																	
02																	
03																	
04	345	8	10	CLR	29.97	66	64	4	1000	SC	66	345		1	345	3sec	2-4
05																	
06																	
07																	
08	345	12	10	CLR	30.00	69	66	4	1500	CU/SC	66	345		1-2	345	3sec	2-4
09																	
10																	
11																	
12	010	14	10	CLR	30.04	71	68	4	1500	CU/CS/CC	68	000		1	000	3sec	4-5
13		14-18															
14																	
15																	
16	1000	14-18	10	CLR	30.00	69	66	0			68	000		1	000	3sec	5-6
17																	
18																	
19																	
20	000	22	10	CLR	29.98	65	62	2	1500	CU/CC	65	000		1	000	3sec	3-5
21																	
22																	
23																	

TABLE II
SYNOPTIC OBSERVATIONS

FIRST GROUP OF MESSAGE	Day of Week (1-7) (GMT)	POSITION OF SHIP			TIME (GMT)	Total Cloud Amt. (Coded)	WIND		Visi- bil- ity (90-99)	WEATHER		PRESSURE	AIR TEMP. (°C)	CLOUDS					Course of Ship (0-9)	Speed of Ship (0-9)	3-HOUR PRESSURE TENDENCY		SIGNIFICANT CLOUD				
		Oc- tant (0-3) (5-8)	Latitude (Degrees and tenths)	Longitude (Degrees and tenths)			Direction (True) (00-36)	Speed (True) (Knots)		Present (00-99)	Past (0-9)			Barometer Corrected (Mb)	Amount of Low Cloud (0-9)	Type of C _L (0-9)	Height of Low Cloud (0-9)	Type of C _M (0-9)			Type of C _H (0-9)	Characteristic (0-8)	Amount of Change (Mb and tenths)	Indicator	Amount (Eights)	Type	Height
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	
	Y	Q	L _s L _n L _a	L _o L _o L _o	GG	N	dd	ff	VV	ww	W	ppp	TT	N _h	C _L	h	C _M	C _H	D _s	V _s	a	pp	8	N _s	C	h _s h _s	
SHIP					00																		8				
SHIP					06																		8				
SHIP					12																		8				
SHIP					18																		8				

Indicator	AIR- SEA DIFF. (Coded)	DEW POINT (°C)	SEA WAVES				SWELL WAVES				ICE ACCRETION				SEA ICE						DO NOT TRANSMIT		
			Indicator	Direction (Coded)	Period (Coded)	Height (Coded)	Indicator	Direction (Coded)	Period (Coded)	Height (Coded)	Indicator	Source	Thickness	Rate	Indicator	Kind	Effect	Bearing	Distance	Orientation	Dry Bulb (Degrees and tenths)	Wet Bulb (Degrees and tenths)	Sea Water Temp. (Degrees and tenths)
28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	A ₁	A ₂	A ₃
0	T _s T _s	T _d T _d	1	d _w d _w	P _w	H _w	1	d _w d _w	P _w	H _w	2	I _s	E _s E _s	R _s	ICE	C ₂	K	D _i	r	e	Celsius	Celsius	Celsius
0			1				1				2				ICE								
0			1				1				2				ICE								
0			1				1				2				ICE								
0			1				1				2				ICE								

E.A.C. CRUISE DATA

SHIP LT 2080DATE 28 Sept 1967

TIME LAT. LONG.

SUNRISE

37°44'

122-22

- Truncus Island (SFO)

SUNSET

1851

36°43'

122-25

TOTAL MILES TRAVELED SUNRISE TO SUNSET 63

POSITION

TIME LAT. LONG.

0400

0600

0800

1000

1200

37°43'

122-41

1400

37-30

122°38'

1600

37 09

122-33

1800

36-53

122-28

2000

36-32

122-23

2400

35-49

122-12

light ship (SFO)

- clearing harbor.

COURSE OR SPEED CHANGE

FROM TO (AT) LAT. LONG.

9 mile off an. coast of Truncus Island. 1650 hours.

E.A.C. CRUISE DATA

SHIP LT-2085DATE 29 Sept 67

	TIME	LAT.	LONG.
SUNRISE	0700	35N	122-26W
SUNSET	1912	35N	125-00W

TOTAL MILES TRAVELED SUNRISE TO SUNSET 130

POSITION

TIME	LAT.	LONG.
0400	35-08N	122-04W
0600	35-00N	122-20W
0800	35-00N	122-47W
1000	35-00N	123-21W
1200	34-58N	123-40W
1400	34-56N	124-02W
1600	34-54N	124-30W
1800	34-56N	124-52W
2000	34-57N	125-10W
2400		

COURSE OR SPEED CHANGE

0440

FROM	TO	(AT)	LAT.	LONG.
170T	270T		35N	122-02W
270T	272T		34-54N	124-30W

E.A.C. CRUISE DATA

SHIP 2085DATE 30 Sept

	TIME	LAT.	LONG.
SUNRISE	0716	34-10N	126-22W
SUNSET	1903	34-07	123-59

TOTAL MILES TRAVELED SUNRISE TO SUNSET 116

POSITION

TIME	LAT.	LONG.
0400	34-42N	126-30W
0600	34-12N	126-30W
0800	34-10N	126-07W
1000	34-09	125-57
1200	34-08	125-20
1400	34-06	125-00
1600	34-06	124-33
1800	34-06	124-13
2000	34-07	123-48
2400		

COURSE OR SPEED CHANGE

01416

0625

FROM	TO	(AT)	LAT.	LONG.
270T	180T		35N	126-30W
180T	090T		34-10N	126-30W

E.A.C. CRUISE DATA

SHIP

2085

DATE

01 October 67

	TIME	LAT.	LONG.
SUNRISE	0701	34-08	121-27
SUNSET	1853	33-22	122-39

TOTAL MILES TRAVELED SUNRISE TO SUNSET 124

POSITION

TIME	LAT.	LONG.
0400	34-07	122-06
0600	34-07	121-38
0800	34-07	121-20
1000	33-40	121-17
1200	33-20	121-20
1400	33-20	121-44
1600	33-21	122-05
1800	33-21	122-35
2000	33-20	122-44
2400		

COURSE OR SPEED CHANGE

FROM	TO	(AT)	LAT.	LONG.
0730	090	180	34-08	121-20
1158	180	270	33-20	121-20

E.A.C. CRUISE DATA

SHIP

2025

DATE

02-oct-1967

	TIME	LAT.	LONG.
SUNRISE	0715	33-17	125-18
SUNSET	1905	32-33	125-22

TOTAL MILES TRAVELED SUNRISE TO SUNSET

119

POSITION

TIME	LAT.	LONG.
0400		
0600	33-18	125-07
0800	33-16	125-28
1000	33-22	125-47
1200	33-15	125-56
1400	32-53	125-55
1600	32-33	125-58
1800	32-32	125-34
2000	32-32	125-11
2400	33	

COURSE OR SPEED CHANGE

	FROM	TO	(AT)	LAT.	LONG.
1056	270	180		33-22	126-00
1620	180	085		32-30	125-58

E.A.C. CRUISE DATA

SHIP 2085DATE 3 OCT 67

	TIME	LAT.	LONG.
SUNRISE	0707	32-29N	123-22W
SUNSET	1848	32-06N	120-59W

TOTAL MILES TRAVELED SUNRISE TO SUNSET 71

POSITION

TIME	LAT.	LONG.
0400	32-30N	124-02W
0600	32-29N	123-37W
0800	32-29N	123-10W
1000	32-30N	122-45W
1200	32-30N	122-17W
1400	32-28N	121-53W
1600	32-25N	121-25W
1800	32-15N	121-00W
2000	31-53N	120-59W
2400		

COURSE OR SPEED CHANGE

	FROM	TO	(AT)	LAT.	LONG.
1600	090T	179T		32-25N	121-25W
1800	119T	180T		32-15N	121-00W
2115	180T	270T		31-40N	121-00W

EAC Cruise Data #

Ship 2085

Date 4 Oct 67

Time

Lat

Long

Sunrise 0710

31-40N

123-06W

Sun Set 1902

31-37N

125-40W

Total miles travelled Sunrise to Sun set 70.5

0600 0400	31-40N	122-30W
0600	31-39N	122-55W
0800	31-37N	123-20W
1000	31-37N	123-46W
1200	31-35N	124-06W
1400	31-35N	124-31W
1600	31-38N	125-03W
1800	31-38N	125-28W
2000	31-37N	125-50W
2400	31-35N	126-28W

Course & Speed Change

Time	From	To	Lat	Long
2308	270T	180T	31-36N	126-30W



OBSERVERS:

Date _____

Pg. #

SPECIMEN

or

[illegible][illegible]

FAC Cruise Data

Ship 2085

Date 5 Oct 67

	Time	Lat	Long
Sunrise	0719	30-50N	125-47W
Sunset	1856	30-49N	123-32W

Total miles traveled Sun rise to Sunset 65

0400	30-50N	126-20W
0600	30-49N	125-56W
0800	30-48N	125-28W
1000	30-48N	125-09W
1200	30-50N	124-45W
1400	30-50N	124-24W
1600	30-45N	124-06W
1800	30-49N	123-42W
2000	30-52N	123-20W
2400		

Course & speed Change

Time	From	To	Lat	Long
0340	180T	090T	31-50N	126-38W



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

Date _____

Pg. #

SPECIMEN

or

[illegible][illegible]

EAC Cruise Data #

Ship

Date _____

Time

hat

Long

Sunrise

Sunset

Total miles travelled from Sunrise to Sunset _____

Time

0400		
0600		
0800		
1000		
1200		
1400		
1600		
1800		
2000		
2400		

Course & Speed Change

Course & Speed Change		Time	From	To	Lat	Long



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

Date _____

Pg. #

SPECIMEN

or

[illegible][illegible]